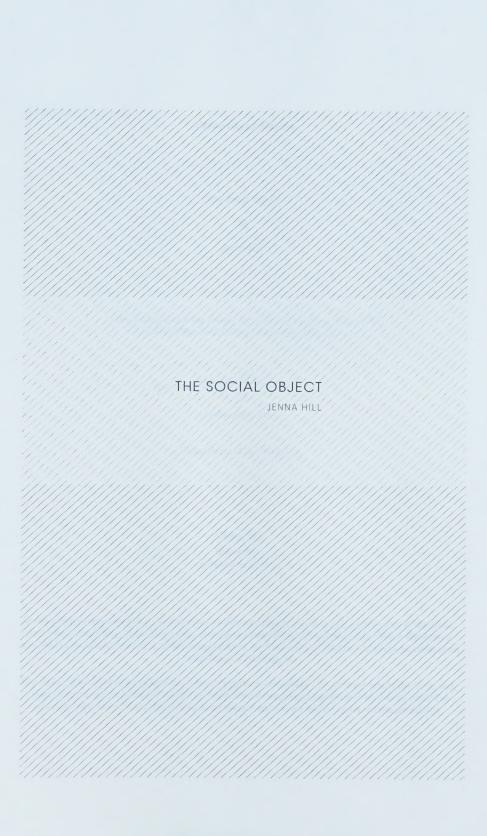


DISC IN POCKET





Digitized by the Internet Archive in 2024 with funding from University of Alberta Library

University of Alberta

The Social Object

by

Jenna Hill

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of

 $\begin{array}{c} \text{Master's of Design} \\ \text{in} \\ \\ \text{Industrial Design} \end{array}$

Department of Art & Design

©Jenna Hill Spring 2011 Edmonton, Alberta

Permission is hereby granted to the University of Alberta Libraries to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly or scientificresearch purposes only. Where the thesis is converted to, or otherwise made available in digital form, the University of Alberta will advise potential users of the thesis of these terms.

The author reserves all other publication and other rights in association with the copyright in the thesis and, except as herein before provided, neither the thesis nor any substantial portion thereof may be printed or otherwise reproduced in any material form whatsoever without the author's prior written permission.

ABSTRACT

Beginning with an analysis of the work of Japanese architecture duo Atelier Bow-Wow as a model for a research-led design practice, this project examines the relations between people and things. Several concepts from social theory and philosophy aid in developing a discourse on objects as social agents. Acknowledging that objects shape, gather, transform and mediate social relations, has obvious implications for design. A new category of object is established to explore the mechanics of *how* objects shape the social—the Social Object. Social Objects are defined by what they do, how they actively mediate and transform relations between humans and things, calling into question who or what is the protagonist of an encounter. The project includes two prototypes of Social Objects which will be presented in an interactive context to explore the potential of considering the social agency of things in the design process.

ACKNOWLEDGEMENTS

First and foremost, I offer my sincere thanks to my supervisor, Rob Shields, who has gently guided and steered me through this process with timely insights and suggestions. I would also like to thank Rob Lederer for his daily encouragement. I am grateful to Joan Greer, Arlene Oak and Cezary Gajewski, for their time and suggestions.

This project would not have been possible without Cam Frith, Ray McAdam and Ken Horne, who have been generous of their time and expertise. In particular, Ken has been an invaluable resource and patient teacher throughout the prototyping process.

Special thanks to Larry Kelly and Dwayne Ried at Trinity Electronics for hier part in making this project come to life.

Many friends and colleagues have shared this journey with me and I'd like to offer them my sincerest thanks. In particular: Allison Murray, without whom studio life would be much less colorful; Geoffery Lilge and Lawrence Kwok who have wonderful officemates; Natalie Kruch, Teng Chong, Michael Rivest and Derek Hopfner and Tammy Primeau, who have cheered me on.

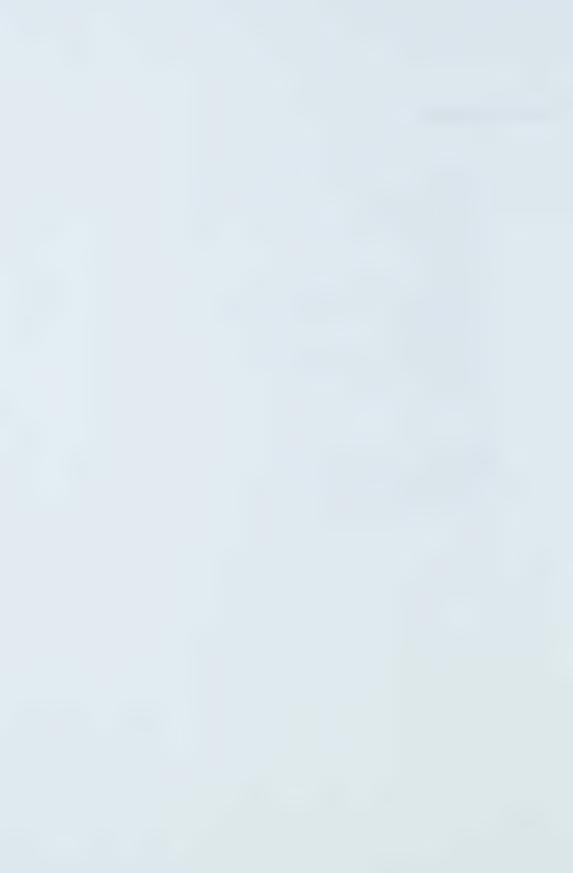
I would like to thank my wonderful parents, Doug and Rita, who have supported me without question throughout all my endeavours, and my siblings, Josh, Sherra, and Ethan, for their support and friendship.

I am especially thankful to Colin Clark for inspiring me everyday.

ACCUSATE MENTALS

TABLE OF CONTENTS

ABSTRACT	5
ACKNOWLEDGEMENTS	7
TABLE OF CONTENTS	9
LIST OF IMAGES	11
A GUIDE TO THIS PROJECT	13
ATELIER BOW-WOW (OR, HOW TO DO DESIGN RESEARCH)	17
HOW THINGS THING	33
"WHAT THINGS DO": AFFORDANCE, AFFECT, AGENCY	39
THE RHETORIC OF THINGS	49
THE SOCIAL OBJECT(IVE)	47
BIBLIOGRAPHY	57
APPENDIX A/ATELIER BOW-WOW	75
APPENDIX B/EVERYDAY ENCOUNTERS	79
APPENDIX C/EXHIBITIONS & WORKS	103



LIST OF IMAGES

3 Atelier Bow-Wow. "White Limousine Yatai" 24 51 Sky Fort 4,5 Atelier Bow-Wow. "Tower Machiya" 29 52 Social Hilltop 52 Social Hilltop 53 Installation view I 54 Installation view I 55 Installation view I 55 Installation view II 56 Social Object 001 56 Everyday Encounters (installation view) 56 Installation view II 56 Everyday Encounters (installation view) 57 Social Object 002 58 Social Object 002 58 Social Object 001 56 Social Object 002 57 Social Object 002 57 Social Object 002 58 Social Object 002 58 Social Object 002 58 Social Object 002 58 Social Object 002 59 Social Object 002	1 Route to House & Atelier Bow-Wow	18	49 Social Light	10
4.5 Atelier Bow-Wow, "Tower Machiya" 29 52 Social Hilltop	2 Atelier Bow-Wow. "White Limousine Yatai"	22		10
Kristina Niederrer. "Social Cups" 43 53 Installation view I 7 80 cial Object 001 59 54 Installation view I I 8 95 coial Object 002 61 56 Everyday Encounters (installation view I I 11 12 12 12 12 13 14 14 15 14 15 14 15 14 15 15	3 Atelier Bow-Wow "White Limousine Yatai"	24]1
Social Object 001 S9	4,5 Atelier Bow-Wow. "Tower Machiya"	29	52 Social Hilltop]1
8,9 Social Object 001 10 Social Object 002 61 11,12 Social Object 002 63 57 Social Object 001 13 Social Object 002 65 14 Social Object 002 65 15 Pages 56 and 57 of the Tokyo City Atlas 66 Tokyo Subway Route Map 77 16 Tokyo Subway Route Map 17 Roll Knoll 18 Cell phone Symphony 18 Cell phone Symphony 19 Baloon Archway 11 Bus Stop Swing 12 Bus Stop Swing 12 Bus Stop Swing 13 Substantial 14 Substantial 15 Tokyo Subway Route Map 16 Tokyo Subway Route Map 17 Find Interval Substantial 18 Cell phone Symphony 19 Cell phone Symphony 19 Cell phone Symphony 19 Cell phone Symphony 10 Cell phone Symphony	Kristina Niederrer. "Social Cups"	43	53 Installation view I	10
10 Social Object 002	7 Social Object 001			10
11.12 Social Object 002	8,9 Social Object 001	60		14
13 Social Object 002	10 Social Object 002			10
14 Social Object 002 67 59 Social Object 002 16 Tokyo Subway Route Map 77 61 Social Object 002 17 Roll Knoll 80 61 Social Object 002 18 Cell phone Symphony 80 62 Ponv Stool 19 Baloon Archway 81 22 Violin Valley 21 Bus Stop Swing 83 3 22 Bus Stop Sundial 83 3 23 Haptic Railing 84 4 24 Super Picnic 84 4 25 Bonsai Bench 85 5 26 Bus Stop Box Step 85 5 27 Balloon Tree 86 6 28 Treetop Perch 86 6 29 Urban "Nap" Sack 87 31 Park n'Grow 89 32 Canne Island 89 33 Snow Bench 90 34 Tete a Tete bench 90 35 Oval Bench 91 36 Highway Bike 91 37 Imaginary Friend Bench 93 48 Elain-I-love Bench 93 49 Elearning Friend 95 <td>11,12 Social Object 002</td> <td>63</td> <td></td> <td>10</td>	11,12 Social Object 002	63		10
15 Pages 56 and 57 of the Tokyo City Atlas 16 Tokyo Subway Route Map 17 Roll Knoll 18 Cell phone Symphony 18 Gell phone Symphony 19 Baloon Archway 20 Violin Valley 21 Bus Stop Swing 22 Bus Stop Sundial 23 Haptic Railing 24 Super Picnic 25 Bonsai Bench 25 Bonsai Bench 26 Bus Stop Box Step 27 Balloon Tree 28 Treetop Perch 28 Treetop Perch 28 Treetop Perch 29 Urban "Nap" Sack 30 Umbrella Chair Share 31 Park in Grow 32 Canoe Island 33 Snow Bench 34 Tete a Tete bench 35 Oval Bench 36 Highway Bike 37 Imaginary Friend Bench 38 Imaginary Friend Bench 39 Gulf 40 Clearing 40 Clearing 41 Enerh/Terrace 42 Super Hammock 43 Slance Bench 44 Sit and be Lit 45 Lamplighter 46 Market bike 47 Urban Rain Collector				.0
16 Tokyo Subway Route Map 77 61 Social Object 002 62 Pony Stool 81 Cell phone Symphony 80 63 Perch Stool 63 Perch Stool 63 Perch Stool 64 Pony Stool 65 Pony Stool 65 Pony Stool 65 Perch				11
17 Roll Knoll 80 62 Ponv Stool			60 Social Object 002 (detail)	10
18 Cell phone Symphony 80 63 Perch Stool 19 Baloon Archway 81 20 Violin Valley 81 21 Bus Stop Swing 83 22 Bus Stop Sundial 83 23 Haptic Railing 84 24 Super Picnic 84 25 Bonsai Bench 85 26 Bus Stop Box Step 85 27 Balloon Tree 86 28 Treetop Perch 86 29 Urban "Nap" Sack 87 30 Umbrella Chair Share 87 31 Park n' Grow 89 32 Cance Island 89 33 Snow Bench 90 34 Teta a Tete bench 90 35 Oval Bench 91 37 Imaginary Friend Bench 93 18 Fall-in-love Bench 93 39 Gulf 94 40 Clearing 94 40 Clearing 94 41 Sit and be Lit 96 42 Staper Hammock 95 43 Balance Bench 96 44 Sit and be Lit 96 45 Lamplighter 97 46 Market bike 97 47 Urban Rain Collector 99				11
19 Baloon Archivay 81 20 Violin Valley 81 21 Bus Stop Swing 83 22 Bus Stop Swing 83 32 Haptic Railling 84 24 Super Picnic 84 25 Bonsai Bench 85 26 Bus Stop Box Step 85 27 Balloon Tree 86 28 Treetop Perch 86 29 Urban "Nap" Sack 87 30 Umbrella Chair Share 87 31 Park n'Grow 89 32 Cance Island 89 32 Cance Island 89 33 Snow Bench 90 34 Tete a Tet bench 90 34 Tete a Tet bench 91 36 Highway Bike 91 37 Imaginary Friend Bench 93 38 Fall-in-love Bench 93 39 Gulf 94 40 Clearing 94 41 Bench/Terrace 95 42 Super Hammock 95 43 Balance Bench 96 44 Sit and be Lit 96 45 Lamplighter 97 46 Market bike 97 47 Urban Rain Collector 99				1.
20 Violin Valley 81 21 Bus Stop Swing 83 22 Bus Stop Sundial 83 23 Haptic Railing 84 24 Super Picnic 84 25 Bonsai Bench 85 26 Bus Stop Box Step 85 27 Balloon Tree 86 28 Treetop Perch 86 29 Urban "Nap" Sack 87 30 Umbrella Chair Share 87 31 Park in Grow 89 32 Cance Island 89 33 Snow Bench 90 34 Tete a Tete bench 90 35 Oval Bench 91 36 Highway Bike 91 37 Imaginary Friend Bench 93 38 Highway Bike 91 39 Gulf 94 40 Clearing 94 40 Clearing 94 41 Bench / Terrace 95 42 Super Hammock 95 43 Balance Bench 96 44 Sit and be Lit 96 45 Lamplighter 97 46 Market bike 47 47 Urban Rain Collector 99			63 Perch Stool	- [
21 Bus Stop Swing 83 22 Bus Stop Sundial 83 23 Haptic Railing 84 24 Super Picnic 84 25 Bonsai Bench 85 26 Bus Stop Box Step 85 27 Balloon Tree 86 28 Treetop Perch 86 29 Urban "Nap" Sack 87 30 Umbrella Chair Share 87 31 Park n'Grow 89 32 Canoe Island 89 33 Snow Bench 90 34 Tete a Tete bench 90 35 Oval Bench 91 36 Highway Bike 91 37 Imaginary Friend Bench 93 18 Fall-in-love Bench 93 39 Gulf 94 40 Clearing 94 41 Bench/Terrace 95 42 Super Hammook 95 43 Balance Bench 96 44 Sit and be Lit 96 45 Lamplighter 97 46 Market bike 97 47 Urban Rain Collector 99				
22 Bus Stop Sundial 83 23 Haptic Railing 84 24 Super Picnic 84 25 Bonsai Bench 85 26 Bus Stop Box Step 85 27 Balloon Tree 86 28 Treetop Perch 86 29 Urban "Nap" Sack 87 30 Umbrella Chair Share 87 31 Park n'Grow 89 32 Cance Island 89 33 Snow Bench 90 34 Teta a Tete bench 90 35 Oal Bench 91 36 Highway Bike 91 37 Imaginary Friend Bench 93 38 Flai-in-love Bench 93 39 Gulf 94 40 Clearing 94 40 Clearing 94 41 Bench/Terrace 95 42 Super Hammock 95 43 Balance Bench 96 43 Balance Bench 96 44 Sit and be Lit 96 45 Lamplighter 97 46 Market bike 97 47 Urban Rain Collector 99				
23 Haptic Railing 84 24 Super Picnic 84 25 Bonsai Bench 85 26 Boss Stop Box Step 85 27 Balloon Tree 86 28 Treetop Perch 86 29 Urban "Nap" Sack 87 30 Umbrella Chair Share 87 31 Park n'Grow 89 32 Canoe Island 89 33 Snow Bench 90 34 Tete a Tete bench 90 35 Oval Bench 91 36 Highway Bike 91 37 Imaginary Friend Bench 93 38 Fall-in-love Bench 93 39 Gulf 94 40 Clearing 94 40 Clearing 94 41 Bench/Terrace 95 42 Super Hammock 95 43 Balance Bench 96 43 Balance Bench 96 44 Sit and be Lit 96 45 Lamplighter 97 46 Market bike 97 47 Urban Rain Collector 99				
24 Super Picnic 84 25 Bonsai Bench 85 26 Bus Stop Box Step 85 27 Balloon Tree 86 28 Treetop Perch 86 29 Urban "Nap" Sack 87 30 Umbrella Chair Share 87 31 Park n'Grow 89 32 Canoe Island 89 33 Snow Bench 90 34 Tete a Tete bench 90 35 Oval Bench 91 36 Highway Bike 91 37 Imaginary Friend Bench 93 38 Fall-in-love Bench 93 39 Gulf 94 40 Clearing 94 40 Clearing 94 41 Bench/Terrace 95 42 Super Hammock 95 43 Balance Bench 96 44 Sit and be Lit 96 45 Lamplighter 97 46 Market bike 97 47 Urban Rain Collector 99				
25 Bonsai Bench 85 26 Bus Stop Box Step 85 27 Balloon Tree 86 28 Treetop Perch 86 29 Urban "Nap" Sack 87 30 Umbrella Chair Share 87 31 Park n Grow 89 32 Cance Island 89 33 Snow Bench 90 34 Tete a Tete bench 90 35 Oval Bench 91 37 Imaginary Friend Bench 93 18 Fall-in-love Bench 93 39 Gulf 94 40 Clearing 94 40 Clearing 94 42 Super Hammock 95 43 Balance Bench 96 44 Sit and be Lit 96 45 Lamplighter 97 46 Market bike 97 47 Urban Rain Collector 99				
26 Bus Stop Box Step 85 27 Balloon Tree 86 28 Treetop Perch 86 29 Urban "Nap" Sack 87 30 Umbrella Chair Share 87 31 Park n'Grow 89 32 Cance Island 89 33 Snow Bench 90 34 Tete a Tete bench 90 35 Oval Bench 91 36 Highway Bike 91 37 Imaginary Friend Bench 93 18 Fall-in-love Bench 93 39 Gulf 94 40 Clearing 94 41 Bench/Terrace 95 42 Super Hammock 95 43 Balance Bench 96 44 Sit and be Lit 96 45 Lamplighter 97 46 Market bike 97 47 Urban Rain Collector 99				
27 Balloon Tree 86 28 Treetop Perch 86 29 Urban "Nap" Sack 87 30 Umbrella Chair Share 87 31 Park n'Grow 89 32 Canne Island 89 33 Snow Bench 90 34 Tete a Tete bench 90 35 Osal Bench 91 36 Highway Bike 91 37 Imaginary Friend Bench 93 38 Fall-in-love Bench 93 39 Gulf 94 40 Clearing 94 40 Clearing 94 41 Bench/Terrace 95 42 Super Hammock 95 43 Balance Bench 96 43 Balance Bench 96 44 Sit and be Lit 96 45 Lamplighter 97 46 Market bike 97 47 Urban Rain Collector 99				
28 Treetop Perch 86 29 Urban "Nap" Sack 87 30 Umbrella Chair Share 87 31 Park n'Grow 89 32 Cance Island 89 33 Snow Bench 90 34 Tete a Tete bench 90 35 Oval Bench 91 36 Highway Bike 91 37 Imaginary Friend Bench 93 18 Fall-in-love Bench 93 39 Gulf 94 40 Clearing 94 41 Bench/Terrace 95 42 Super Hammock 95 43 Balance Bench 96 44 Sit and be Lit 96 44 Sit and be Lit 96 45 Lamplighter 97 46 Market bike 97 47 Urban Rain Collector 99				
29 Urban "Nap" Sack 87 30 Umbrella Chair Share 87 31 Park n Torow 89 32 Canoe Island 89 33 Snow Bench 90 34 Tete a Tete bench 90 35 Oval Bench 91 36 Highway Bike 91 37 Imaginary Friend Bench 93 39 Fall-in-love Bench 93 39 Gulf 94 40 Clearing 94 40 Clearing 94 41 Bench/Terrace 95 42 Super Hammock 95 43 Balance Bench 96 44 Sit and be Lit 96 45 Lamplighter 97 46 Market bike 97 47 Urban Rain Collector 99				
30 Umbrella Chair Share 87 31 Park n Grow 89 32 Cance Island 89 33 Snow Bench 90 34 Tete a Tete bench 90 35 Oval Bench 91 36 Highway Bike 91 37 Imaginary Friend Bench 93 38 Fall-in-love Bench 93 39 Gulf 94 40 Clearing 94 40 Clearing 94 41 Bench/Terrace 95 42 Super Hammock 95 43 Balance Bench 96 43 Balance Bench 96 44 Sit and be Lit 96 45 Lamplighter 97 46 Market bike 97 47 Urban Rain Collector 99				
31 Park n'Grow 32 Cance Island 38 9 32 Cance Island 38 9 33 Snow Bench 90 34 Tete a Tete bench 91 35 Oval Bench 91 36 Highway Bike 91 37 Imaginary Friend Bench 93 38 Fail-in-love Bench 93 39 Gulf 94 40 Clearing 94 40 Clearing 95 42 Super Hammock 95 43 Balance Bench 96 44 Sit and be Lit 96 45 Lamplighter 97 46 Market bike 97 47 Urban Rain Collector 99				
32 Cance Island 89 33 Snow Bench 90 34 Tete a Tete bench 90 35 Oval Bench 91 36 Highway Bike 91 37 Imaginary Friend Bench 93 38 Fall-in-love Bench 93 39 Gulf 94 40 Clearing 94 41 Bench/Terrace 95 42 Super Hammock 95 43 Balance Bench 96 43 Balance Bench 96 44 Sit and be Lit 96 45 Lamplighter 97 46 Market bike 97 47 Urban Rain Collector 99				
33 Snow Bench 90 34 Tete a Tete bench 90 35 Oval Bench 91 36 Highway Bike 91 37 Imaginary Friend Bench 93 18 Fall-in-love Bench 93 39 Gulf 94 40 Clearing 94 41 Bench/Terrace 95 42 Super Hammook 95 43 Balance Bench 96 44 Sit and be Lit 96 45 Lamplighter 97 46 Market bike 97 47 Urban Rain Collector 99				
34 Tete a Tete bench 90 35 Oval Bench 91 36 Highway Bike 91 37 Imaginary Friend Bench 93 38 Fall-in-love Bench 93 39 Gulf 94 40 Clearing 94 41 Bench/Terrace 95 42 Super Hammock 95 43 Balance Bench 96 44 Sit and be Lit 96 45 Lamplighter 97 46 Market bike 97 47 Urban Rain Collector 99				
35 Oval Bench 91 36 Highway Bike 91 37 Imaginary Friend Bench 93 38 Fall-in-love Bench 93 39 Gulf 94 40 Clearing 94 41 Bench/Terrace 95 42 Super Hammock 95 43 Balance Bench 96 43 Lamplighter 97 46 Market bike 97 47 Urban Rain Collector 99				
36 Highway Bike 91 37 Imaginary Friend Bench 93 18 Fall-in-love Brach 93 39 Gulf 94 40 Clearing 94 41 Bench/Terrace 95 42 Super Hammock 95 43 Balance Bench 96 44 Six and be Lit 96 45 Lamplighter 97 46 Market bike 97 47 Urban Rain Collector 99				
37 Imaginary Friend Bench 93 18 Fall-in-love Bench 93 39 Gulf 94 40 Clearing 94 41 Bench/Terrace 95 42 Super Hammock 95 43 Balance Bench 96 44 Sit and be Lit 96 45 Lamplighter 97 46 Market bke 97 47 Urban Rain Collector 99				
18 Fall-in-love Bench 93 39 Gulf 94 40 Clearing 94 41 Bench/Terrace 95 42 Super Hammook 95 43 Balance Bench 96 44 Sit and be Lit 96 45 Lamplighter 97 46 Market bike 97 47 Urban Rain Collector 99				
39 Gulf 94 40 Clearing 94 41 Bench/Terrace 95 42 Super Hammock 95 43 Balance Bench 96 44 Sit and be Lit 96 45 Lamplighter 97 46 Market bike 97 47 Urban Rain Collector 99				
40 Clearing 94 41 Bench/Terrace 95 42 Super Hammock 95 43 Balance Bench 96 44 Sti and be Lit 96 45 Lamplighter 97 46 Market bike 97 47 Urban Rain Collector 99				
41 Bench/Terrace 95 42 Super Hammock 95 43 Balance Bench 96 44 Sit and be Lit 96 45 Lamplighter 97 46 Market bike 97 47 Urban Rain Collector 99				
42 Super Hammock 95 43 Balance Bench 96 44 Sit and De Lit 96 45 Lamplighter 97 46 Market bike 97 47 Urban Rain Collector 99				
43 Balance Bench 96 44 Sit and be Lit 96 45 Lamplighter 97 46 Market bike 97 47 Urban Rain Collector 99				
44 Sit and be Lit 96 45 Lamplighter 97 46 Market bike 97 47 Urban Rain Collector 99				
45 Lampighter 97 46 Market bike 97 47 Urban Rain Collector 99				
46 Market bike 97 47 Urban Rain Collector 99				
47 Urban Rain Collector 99				
48 Text Wall 99				
	48 Text Wall	99		

"What I seek to form, to compose, to promote... is a *syrrhèse*, a confluence not a system, a mobile confluence of fluxes. Turbulences, overlapping cyclones and anticyclones, like on the weather map. Wisps of hay tied in knots. An assembly of relations."

-Michel Serres, Conversations on Science, Culture, and Time. p.122

A GUIDE TO THIS PROJECT

The essays that follow are the culmination of two years of research undertaken as part of a Master's Thesis in Design. They are gathered here as a collection of independent thoughts though there are many points where they intersect. Taken as a whole they construct a kind of assemblage of my own developing perspective on design theory and practice which has been the primary purpose and outcome of this research. This document is not intended as a comprehensive survey but as a record of reading and reflection which compliments the making process. The prototypes and objects presented in conjunction with this written work are an extension of these theoretical reflections. As Clive Dilnot proposes (and I would agree) "... design is a deliberation about the possible conducted not only in thought... but through emblematic constructions in the form of propositions—prototypes—that have the topographical form 'this!?'—meaning that they are at once assertions and questions, both real and prefigurative (real and fictive) in the same moment." Each essay, and the drawings and objects presented here could be said to be making the same statement "this!?" and should be taken as both questions and assertions about the relationship between humans and objects and the purpose of design.

The first section, "Atelier Bow-Wow (or How To Do Design Research)," analyses the design practice of Japanese architecture duo Atelier Bow-Wow, presenting their research methodology as a prototype for design practice. The following three sections blend perspectives from social theory and design studies on the relationship between people and things. "How Things Thing" illustrates the social role of objects and points out that objects of design, sometimes design themselves in unexpected or unforeseen ways. "What Things Do: Affordance, Affect, Agency" analyses how objects mediate social relations. And, "A Rhetoric of Things" outlines a revised ethics of design which accounts for the capacity of objects to shape the social. The following sec-

¹ Clive Dilnot, "Ethics in Design: 10 Questions," <u>Design Studies: A Reader</u>, eds. Hazel Clark and David Brody (Oxford and New York: Berg, 2009) 184-185.

tion, "Everyday Encounters," presents a series of short vignettes documenting everyday experiences as well as proposals—in the form of drawings—for encounters between people and things. The final section, "The Social Object(ive)," builds upon the concepts examined throughout this document and proposes a new category of object, the social object.

ATELIER BOW-WOW (OR, HOW TO DO DESIGN RESEARCH)

This essay begins with a description of a journey through Tokyo to visit Atelier Bow-Wow at their studio. It describes in detail the research practices and philosophical underpinnings which characterize their design practice. It presents these practices as a research prototype for design, particularly in the way that they combine field research with arts-based inquiry. Observation is stressed as an effective method for overcoming some of the pitfalls presented by traditional design research.

(Key words: Atelier Bow-Wow, Lefebvre, De Certeau, participant-observation, Tokyo, the production of space, design, architecture, art, design research)

HOW THINGS THING

This section outlines some competing ideas on the "socialness of things," or how objects are involved in social processes of meaning creation. In particular it summarizes Bruno Latour's theory of relations (aka. Actor Network Theory), his main contribution to sociology, which attempts to rematerialize the field of inquiry. In other words, he recognizes that objects have their own social agencies which shape society. It offers a few examples of object-agents to clarify.

(Key words: Latour, Actor Network Theory, agency, sociology, material culture)

WHAT THINGS DO: AFFORDANCE, AFFECT, AGENCY

This section examines the micro-scale interactions that occur between people and things. Attempting to uncover the ways in which objects mediate our actions and experiences, this section traces a connection between the concepts of affordance (Gibson), affect (Deleuze), and the agency of objects (Latour).

(Key words: mediation, affordance theory, affect, Gibson, Deleuze, Latour, agency)

A RHETORIC OF THINGS

If objects are inherently social, and not simply in the ways in which they operate as signs, this changes the work of design significantly. Many support the notion that an ethics of design which extends to the social arguments made by things is one step in a practicable answer to forestall ecological despoliation. This essay discusses what a "materialised ethics" might be and what the limitations of this extension of responsibility are.

(Key words: design, ethics, sustainability, rhetoric, Latour, "the parliament of things")

THE SOCIAL OBJECT(IVE)

The collection of concepts laid out in the above essays result in the formation of a new proposition—the *social object*. A social object, facilitates new kinds of interactions between people and things, and calls into question who or what is the main protagonist of a space. Presented in conjunction with the final thesis presentation two *social objects* explore light as a social agent. As a research tool, these objects can be conceived as spatio-temporal arrangements, crystallizations, or "jigs" which uncover the affective potential of objects.

(Key words: "jig," social object, affect, agency, affordance, interaction, light, space)



ATELIER BOW-WOW (OR, HOW TO DO DESIGN RESEARCH)

FOREWORD

The subway journey from Shin-Nakano is six stops on the Marunouchi Line. Shinjuku Station is about halfway. I had been surprised earlier that Atelier Bow-Wow's studio was so close, practically in the same neighbourhood. In the context of Tokyo, six stops is close—close enough to walk.² The fact that we didn't need to change lines, is a relative miracle.

Exiting the train at Yotsuya-Sanchome, I looked for the yellow signs that would lead to Exit 1. It's on the other side of the station, requiring a path up, then down, and down again under the track to ascend again on the other side of the station. We take a brief glance at the station map to help orient us to this new place. Still I emerge slightly disoriented on a street that seems that it could be almost anywhere, and is not unlike the neighborhood we just left.

Here, the subway stations are like landing strips for collapsed time and space. They act as subterranean beacons, landmarks for orienting oneself in the chaos of the city. I am always surprised at subway maps; how they are organized to display the necessary information with straight lines and regular geometry, allowing for all the necessary labels, but looking at a "real" map of the city reveals a more organic geometry. To me the city is experienced as a chain of islands: Shin-Nakano, Shinjuku, Harajuku, Ginza, Roppongi, Ikebukuro, Shibuya, Kichijoji —pages 26, 28, 10, 14, 24, 30, and 54 of the Tokyo City Atlas. Each island radiates from the nuclei of a train station, the islands do not touch, they are pages without connection, a hypertext. Today the feeling is no different. I emerge as a time traveller, slightly disoriented but knowing "where" I am. We started from page 56 B3 in Nakano-ku, Honcho and are now on page 57 G5 in Shinjuku-ku, Sugacho.

Our destination is only a few minutes walk from the station.

Here, now with the orienting effect of the station behind me I feel myself a dual being. Recalling the map on page 57, I can imagine my-speck-self moving along its plane. At the same time I am feeling the cool greyness of the day and wondering whether it will rain again today. I walk south along Gaien-Higashi Dori —a path we had planned prior to leaving the apartment.

This street is wide, it seems to be an artery. I wonder vaguely what the city might feel like from a car.

I notice the tall buildings on each side of the street and from the side streets we cross I can see that there is a residential neighborhood tucked in behind the curtain of taller buildings. I am reminded of Tsukamoto's article on urban patterns in Tokyo and the phenomenon he describes as "crust and filling," large fireproof buildings encircling a neighborhood of small wooden framed buildings.³

² A quick check on Google Maps estimates the walk to be around an hour and ten minutes.

³ Yoshiharu Tsukamoto, "Archigram Meets Locality," <u>Architectural Papers Iv: Iconoclastia</u>, ed. Chair of Prol Dr. Josep Lluis Mateo (Zurich: ETH, 2009).



1 Route to House & Atelier Bow-Wow from Yotsuya San-Chome Station

I first encountered Atelier Bow-Wow in 2004, I was living in Osaka at the time trying to make sense of my future. I went to an exhibition of Bow-Wow's work called "How to Use the City." It's not that I chose to enter a program in design because of the exhibition; there were many other contributing factors, my day-to-day experience of living in Japan being one of them, but their work has resonated with me and I have often found myself reflecting on it in my academic life.

We cross Gaien-Higashi Dori and take a narrow side street. There is a small children's park on the left as we enter the "filling." We pass some city workers installing or repairing some kind of utility under the road. We take another left and walk a few meters onto an equally narrow street.

We stop—unsure if we have passed it. It's easy to miss.

The studio, which is known as "House&Atelier Bow-Wow" and serves as both home and office, is on what is known as a flagpole lot"—a phenomenon that occurs when a lot is divided in two, one property occupies a front corner of the lot and another wraps around the back, resulting in what looks like a flagpole from plan view. We look around and see a small opening a few steps behind where we are standing.

We look down the narrow path that is laid with casually spaced stones and see a person working at a computer through a glass door. Only the monitor and the top of her head are visible.

I gather my nerves and take the path.5

⁴ Terunobu Fujimori, "The Origin's of Atelier Bow-Wow's Gaze," trans. Nathan Elchert, <u>Atelier Bow-Wow: Behaviorology</u>, eds. Ian Luna and Lauren A. Gould (New York, NY: Rizzoli, 2010) 127.

⁵ The young woman who answered informed me that Tsukamoto-San and Kaijima-San were unavailable. I had tried to arrange an appointment a few weeks before but received no answer. I decided, at the urging of my supervisor, and with the knowledge that I had nothing to lose, to try them at their office even without an appointment.

ATELIER BOW-WOW: A CASE STUDY

Atelier Bow-Wow is a Tokyo based architecture firm established by two principle members, Yoshinori Tsukamoto and Momoyo Kaijima. A cursory look at the range of their work appears to be a mixed bag of residential buildings, urban guidebooks, articles and exhibitions, closer examination reveals an encompassing design philosophy, an approach they have recently described as *behaviorology*. *Behaviorology*, emphasizes the complex interplay between humans, natural elements and built environments. Cities, neighborhoods, buildings, and sidewalks are comprehended as ecosystems, wherein interactions and relations between humans, nature and built forms unfold over varying timescales. The city, both the subject and object of their research, is conceived as an evolving organism worthy of attention and consideration, its everyday rhythms (ordinary moments, situations and encounters) reveal its essential character, its structure, and perhaps most importantly its disposition.

The system of research that has evolved from their attentiveness to "the relationships between configurations of objects and people's behaviors, between the disposition of things and the disposition of people" is indicated in their earliest publications and exhibitions. *Made in Tokyo* and the *Pet Architecture Guidebook*, both published in 2001, detail what are often overlooked and undervalued features of the urban landscape. *Made in Tokyo* (which included an exhibition and website) was the result of 10 years of research into "da-me architecture," literally translated as "no-good architecture." *Da-me* architecture are those buildings which would not normally be considered in architectural surveys which "result from the honest proliferation of urban situational needs." The buildings such as "golf taxi building" (a combination of a taxi business and driving range) and "super car school" (a supermarket with a driving school on the roof) reflect a hybridity of uses or unusual site

⁶ Yoshiharu Tsukamoto, "Architectural Behaviorology," trans. Steven Chodoriwsky, Ibid. 15.

⁷ Yoshizaku Nango, "Behaviors That Atelier Bow-Wow Call Research," trans. Nathan Elchert, Ibid. 328.

⁹ Momoyo Kaijima, <u>Made in Tokyo, Internet Version,</u> 2000, Available: http://www.dnp.co.jp/museum/nmp/madeintokyo_e/mit.html#3, August 13 2011.

constraints. As they note: "urbanity is directly recorded through form: site conditions and functions can be read in this physically defined system where each single building is the coming together of goods, traffic, information, production, services, housing and so on."¹⁰

With a similarly subversive eye, *Pet Architecture Guidebook* documented "buildings so small that they would not ordinarily be discussed as architecture." The buildings "bigger than a doghouse but smaller than 'rabbit hutches'(... used derisively in Japanese to refer to extremely small homes)" often appear in relation to larger buildings. Existing in the spaces between buildings or sprouting from the corners of adjacent buildings they make use of the tiny, irregularly shaped lots which are the result of plot subdivisions and changing urban infrastructures. The vernacular of these small buildings is nonspecialized, resulting from necessity and constraint rather than from any grand design agenda. The relationship between the smaller buildings and larger neighboring buildings, their humble appearance and diminutive size, earned them the descriptor "pet architecture." Bow Wow carefully documented more than 80 examples found throughout Tokyo complete with a guide map and a few their own proposals for pet architecture.

In addition to their publications, they exhibit internationally what they call *micro public space*. Often reframing or re-contextualizing social practices in absurd ways *micro public spaces* invite the critical engagement of passersby. Tsukamoto on *micro public space:*

They appear in various forms—artificial topography, small buildings, mobile structures, large furniture—but they all share the characteristic of a defamiliarized social space, embedded in the fabric of existing buildings and furniture. Daily life is thus framed, as if by a film or theater director, into something lighthearted, sweet or humorously self-evident.¹²

¹⁰ Ibid

¹¹ Yoshizaku Nango, "Behaviors That Atelier Bow-Wow Call Research," trans. Nathan Elchert, <u>Atelier Bow-Wow; Behaviorology</u>, eds. Ian Luna and Lauren A. Gould New York, NY; Rizzoli, 2010: 326.

¹² Yoshiharu Tsukamoto, "Architectural Behaviorology," trans. Steven Chodoriwsky, Ibid. 14.



2 Atelier Bow-Wow "White Limousine Yatai" (2003) Niigata, Japan. Echigo Tsumaari Art Triennalt 2003. Source: Atelier Bow-Wow, https://www.bow-wow.jp/profile/exhibution_c.html

Micro public spaces fall under the rubric of what has been termed the "new public art" —artworks which use public space in innovative or unexpected ways, and elicit the participation of viewers in their production or enactment. Furnicycle, a micro public space for the 2002 Shanghai Biennial, consisted of the creation of five bicycle-furniture hybrids, that when parked together allow for an impromptu seating arrangement. The project arose from their observation of how people use public space in Shanghai; the residents often brought furniture out into the street as an ad-hoc social space, and the bicycle plays a central role in their way of life. Bow-Wow hybridized these two important practices and reframed them for the exhibition. The defamiliarized forms of the bicycle-furniture hybrids acted as an invitation for participation and the resulting social space exposed Shanghai's everyday moments as important social and cultural practices.

Other micro public spaces follow a similar pattern of extrapolating from preexisting objects or forms and uncovering them as agents in the creation of social space. The White Limousine Yatai (2003) exhibited as part of the Echigo-Tsumaari Art Triennale, explored the social and cultural significance of an otherwise common and overlooked feature of the Japanese urban environment. The yatai, literally "shop stand," is a mobile noodle restaurant which is a ubiquitous feature of the Japanese urban landscape. Yatai, typically occupy any available space along sidewalks and streets, peddling Japanese cuisine (typically ramen or oden) and sake to passersby. The small cramped seating arrangement affords a certain degree of commraderie among the patrons, often a brief stop for a bowl of ramen develops into engaging conversation late into the evening. Bow-Wow's yatai made explicit use of the yatai's social nature, even its extraordinary size required the collaboration of many people to move it into place. Bow-Wow uses *micro public space* as a form of inquiry into the nature of urban space itself, serving as a kind of experimental space wherein everyday experiences and interactions are brought into a state of

¹³ Susan Finley, "Arts-Based Inquiry," The Sage Handbook of Qualitative Research, eds. Norman K. Denzin and Yvonna S. Lincoln, 3rd ed. (Thousand Oaks: Sage Publications, 2005) 684



3 Atelier Bow-Wow "White Limousine Yatai" [2003] Niigata, Japan. Echigo Tsumaari Art Triennala 2003. Source: Atelier Bow-Wow. ≤http://www.bow-wow.jp/profile/exhibition_c.html>

emergence. *Micro public spaces* become miniatures of the social, natural and spatial-temporal impulses that form space.

The research strategy apparent in the guidebooks and *micro public spaces* aid in uncovering the evolving spatial narratives (behaviors) of the city. Armed with this knowledge, they aim to create "lively spaces where the forms of being and doing are in special echo with each other." Atelier Bow-Wow does not seek to adopt or mimic the formal qualities of the buildings they discover in their research, rather they apply the special "forms of doing" to new "forms of being." For example, the building behaviors discovered in pet architecture indicate possibilities for a new generation of architectural behavior in Tokyo that makes use of the gap spaces between buildings (their own studio is an example of this).

THE CITY AS SOCIAL OBJECT

French sociologist and philosopher Henri Lefebvre's theory on the social production of space has had a central role in the way that Bow-Wow approaches the urban environment.¹⁵ Lefebvre's theory opposed the traditional notion of space a mere container for everyday life, he argued that space was the product of the dynamic interplay of overlapping and often contrary spatial programs, "an interlinkage of geographic form, built environment, symbolic meanings, and routines of life." Lefebvre distinguished three dimensions of space: spatial practices (perceived), representations of space (conceived), and spaces of representation (lived), which exist in a contingent triple dialectical relationship. To clarify: spatial practice is the material dimension of "everyday practice[s] and perception," the built environment and the humans who act within it on a daily basis. Representations of space are

¹⁴ Atelier Bow-Wow, Echo of Space/Space of Echo, trans. Kumiko Yamamoto, Contemporary Architect's Concept Series (Tokyo: INAX Publishing, 2009) 16.

 $^{15\} Yoshiharu\ Tsukamoto, "Atelier\ Bow-Wow:\ Tokyo\ Anatomy,"\ (2007), Interview\ with\ Mason\ White,\ 27\ January\ 2010\ http://www.archinect.com/features/article.php?id=56468_0_23_0_cc>.$

¹⁶ Harvey Molotch, "The Space of Lefebvre," Theory and Society 22.6 (1993): 888.

¹⁷ Rob Shields, Lefebyre, Love & Struggle (London and New York: Routledge, 1999).

¹⁸ Ibid, 120, 160.

"discourses on space," space as it is analyzed and formulated by geographers, architects, planners and "expert knowledges that conceive space." Spaces of representation are space as it is "fully lived" by users of space—discursive space which overturns (or negates) both spatial practice and representations of space through appropriation and independent processes of signification. According to Rob Shields, in Lefebvre, Love & Struggle, spaces of representation are "space as it might be" which "burst forth" from the everyday as "moments of presence." Moments" are defined by Shields as:

...those times when one recognizes or has a sudden insight into a situation or an experience beyond the merely empirical routine of some activity. A moment is a flash of the wider significance of some 'thing' or event—its relation to the whole, and by extension, our relation to totality.²²

In this definition "moments of presence" exist within the everyday, and yet are also distinct from it in that they reveal latent potentialities within space that may be difficult to discern from the vantage of the everyday. For Lefevbre, space is important because "it is fundamentally bound up with social reality." "Moments' catalyze a restructuring of reality, in other words, Lefevbre saw 'moments' and *spaces of representation* as key to any revolutionary program of social change and positioned them in opposition to the pervasive alienation of postwar consumer society. Atelier Bow-Wow takes 'moments' as a design imperative, insisting that: "it is not people who create social spaces but social spaces that use people to bring themselves into being."

Bow-Wow understands the city as a "self-generating" entity resulting from of the actions of individuals operating in the spaces between, the gaps and the

¹⁹ Ibid. 161.

²⁰ Ibid. 120,161.

²¹ Ibid. 161.

²² Ibid. 58.

²³ Christian Schmid, "Lefevbre's Theory of the Production of Space," trans. Bandulasena Goonewardena, <u>Space</u>, <u>Difference, Everyday Life: Reading Henri Lefebyre</u>, eds. Kanishka Goonewardena, Stefan Kipfer, Richard Milgrom and Christian Schmid (New York and London: Routledge, 2008) 28.

²⁴ Henri Lefebvre, <u>Everyday Life in the Modern World</u>, Communications Series (New Brunswick, N.J., U.S.A.: Transaction Books, 1984) xi, 94.

²⁵ Meruro Washida, "Atelier Bow-Wow as Artists: Changes in Art and the Potential of New Social Space," trans. Nathan Elchert, <u>Atelier Bow-Wow: Behaviorology</u>, eds. Ian Luna and Lauren A. Gould (New York, NY: Rizzoli, 2010) 251.

voids that are the remainder of strategic attempts to formally plan space.²⁶ Michel de Certeau's influential book The Practice of Everyday Life provides a similar understanding of the city, in which the practices of individuals acting in the city are presented as "tactics" which counterbalance the institutionalization of space by those who seek to "ideologize the city." A "tactic" can be as basic as pedestrian movements through the city which de Certeau views as politicized "speech acts;" in an apparent inversion of power, "walkers" in the city are understood as the true producers of space, it is through their actions that certain spaces of the city thrive and others are condemned to disuse.²⁸ Bow-Wow's approach to the city embodies de Certeau's assertion, they view the city as not as the product of the visions of planners and architects, but rather realized through individual "speech acts" found in urban space, and to which their study of Tokyo attests. Through their eyes Tokyo can be conceived as a social object, possessing of its own kind of selfgenerating agency which is at once determining and in the process of being determined.

A PROTOTYPE FOR AN INTEGRATIVE APPROACH TO DESIGN AND RESEARCH

Thus far this examination of Atelier Bow-Wow's practice underscores the philosophical motivations which drive their research. Additionally, it demonstrates the fluidity of the relationship between their research and design practices. There are several aspects of their practice which can be translated into a prototype or model for research-led design practice more generally.

They make the everyday unknown.²⁹ Atelier Bow-Wow adopts an "eccentric gaze" which examines a domain that architects typically ignore,

²⁶ Yoshiharu Tsukamoto, "Architectural Behaviorology," trans. Steven Chodoriwsky, Ibid. 13.

²⁷ Michel de Certeau, The Practice of Exeryday Life (Berkeley: University of California Press, 1984).

²⁸ Ibid. 91-99.

²⁹ Japanese designer Kenya Hara discusses a similar technique in his book Designing Design, he refers to it a s "making the ordinary unknown." See: Kenya Hara, <u>Designing Desing</u> (Baden, Switzerland: Lars Müller Publishers, 2008) 22. Also, product designer Naoto Fukusawa and IDEO's Jane Fulton Suri have explored similar processes, documenting the ways in which people make creative use of their environment as a means of uncovering new possibilities for design.

the everyday spaces of the city.³⁰ This gaze translates everyday situations and contexts into curious or extraordinary phenomenon thereby making them unknown. Employing observation as a research strategy is not an altogether foreign concept in design. Indeed much of the project of design as a problem solving activity is *identifying problems* by observing objects in context. However, Bow-Wow is engaged in a form of observation which is more geared towards *identifying possibilities*. The particular 'way of seeing' which Bow-Wow employs in their research reveal hidden potentials and agencies which operate within the everyday. Through carefully examining the underlying patterns and principles which guide space, a kind of collective intelligence or logic emerges and the "latent city [is disclosed] within the actual city."³¹

They listen to rhythms. As participant-observer-architects, they don't conduct interviews, or organize test groups as is done traditionally in 'user-centered design.' The term 'user' could be said to be contrary to their entire design philosophy, evoking "a figure conceived as a bundle of needs and impairments—cognitive, physical, emotional." Their 'user' is much more competent than this. Their gaze, it has been noted, "takes a group of buildings that had no voice and revitalizes them as objects that are inscribed by the activities and creative ingenuity of people." The 'user' is thus transported from a position of passive use to active production. The conventional boundaries between those that conceive space (architects, planners, geographers) and those that interact with space (users) is specifically what they seek to overcome through their research. Bow-Wow's "Tokyo" is an ever changing subject, complete with its own attitudes, dispositions and rhythms. By "train[ing] their ears on the dense layers of compositional elements that surround buildings and cities," the "natural, topographical, social, economic

³⁰ Fujimori, "The Origin's of Atelier Bow-Wow's Gaze," 125.

³¹ Enrique Walker, "Compendium," Ibid. 349.

³² Ellen Lupton, Thinking with Type: A Critical Guide for Designers, Writers, Editors, & Students, Design Briefs, 1st ed. (New York: Princeton Architectural Press, 2004) 73.

³³ Nango, "Behaviors That Atelier Bow-Wow Call Research," 322.





4.5 Atelier Bow-Wow. "Tower Machiva."
2010. Shinjuku, Tokyo. Source: Atelier Bow
Wow, < //www.bow-wow.jp/profile/2010/
TowerMochiva/index.html>

and political rhythms," Bow-Wow is aligning their own spatial practices with those of 'users.'

They generate feedback loops. Atelier Bow-Wow generate new phenomena, or new proposals for space, by first observing the behavioral phenomena that they encounter in everyday life, and then intervening in these patterns. This process activates a "feedback loop" between their research and design practice.34 For example, studies in marginal phenomenon, such as the hybrid-morphologies documented in Made in Tokyo, are linked to intervention strategies which experiment with hybridization as in Furnicycle, behaviors uncovered through these observations and interventions are abstracted into spatial principles which inform their architectural practices. The feedback loops generated through these practices also contribute to discourses which shape the city. Through the guidebook format they "[transform] familiar architectures in the city into findings, and in turn into alternative architectures for the city."35 Through the micro public spaces, they respond to and make tangible the spatial practices and spaces of representation already present in the city.

They cross disciplinary boundaries without crossing disciplines. The observation/intervention research strategy

outlined above demonstrates a hybridization of practices from social sciences and fine arts. The observation strategy they employ in their surveys of urban phenomenon, is more typically found in sociology or ethnography. Their engagement with public space through their exhibition practices is found in contemporary art practices as well. Their intentions within these practices however are not to expand discourses of art or urban sociology, but to engage with the complexity of processes—social, historical, morpho-

³⁴ Ibid. 332.

³⁵ Enrique Walker, "Compendium," Ibid. 345

"[A] place's 'form of being' always shows the people involved how it's 'form of doing' should be. Any space that lack such an organic connection between the forms of being and doing would be without support from within. It might be pleasing to the eye for a brief moment, but would not grow together with those who use it."

Atelier Bow-Wow, Echo of Space/Space of Echo p.16

logical—which shape design. Bow-Wow conducts research in both the 'field' and in the 'studio' but they are always engaging with this research as a means to design.

They are sensitive to the interconnection of people, things and environments. This promotes a conception of the city as a totality, an "ecosystem of behaviors."³⁶ This celebrates the interdependent mechanisms which support and sustain an organic connection between the cities hard (practical, material) and soft (social, cultural) organizing structures. In this way the urban environment can be viewed as a repository of behaviors which informs their creative design practice.

IN CONCLUSION

This section has served to present a prototype for design research which I have discovered in the practice of Atelier Bow-Wow. Though the guidebooks, exhibitions and residential buildings which make up the core of their work may appear in different formats, they note "this is in no way schizophrenic; rather the projects tend to contaminate, inform and mutually develop one another." As has been indicated, Atelier Bow-Wow fluidly integrates their research practices with their design practices. They make no distinctions between their design practices and research practices, rather all of their projects are taken as opportunities for inquiry into the relationships between humans, buildings, and environments.

³⁶ Yoshiharu Tsukamoto, "Architectural Behaviorology," trans. Steven Chodoriwsky, Ibid. 15. 37 Ibid. 8.

"Humanity begins with things; animals don't have things."

Michel Serres, Conversations on Science, Culture and Time,p.166

HOW THINGS THING

OBJECT DIMENSIONS

Objects, it seems have a split-personality. They possess actual dimensions, a material reality, and yet also an abstract dimension, a social reality. The various lenses with which discrete disciplines examine objects, tend to focus on one or another of these two dimensions. Socially, objects are used to indicate status, define social bonds, and express social groupings; "the objects that people use, despite their incredible diversity and sometimes contradictory usage, appear to be a signs on a blueprint that represent the relation of man to himself, his fellows, and to the universe."38 Practically speaking, objects are answers to specific needs. As Julka Almquist and Julia Lupton, note: "for design researchers in the social sciences utility is the essential question namely 'how things work...the degree to which designs serve practical purposes and provide affordances or capabilities" and on the other hand "humanist interpreters of design...tend to emphasize meaning and interpretation at the expense of affordance and use."39 However, focusing on "things-in-themselves" or "people-among-themselves" can lead to losses in both instances, 40 in reality the material dimension of an object is inextricable from its social dimension:

...in general our tools[...]are simultaneously objects of this world and objects of society. Every technology transforms our rapport with things[...] and at the same time, our relations among ourselves[...]certain instruments, certain theories, lean more in one direction, others in another, but all show both aspects as well.⁴¹

As Stephen Harold Riggins notes in *The Socialness of Things*, "specialists in material culture studies have understood for sometime—unlike many soci-

³⁸ Mihaly and Eugene Rochberg-Halton Csikszentmihalyi, <u>The Meaning of Things: Domestic Symbols and the Self</u> (Cambridge, UK: Cambridge University Press, 1981) 38.

³⁹ Julia and Julia Lupton Almquist, "Affording Meaning: Design-Oriented Research from the Humanities and Social Sciences," Design Issues 26.1 (2010): 4.

⁴⁰ Michel Serres and Bruno Latour, <u>Conversations on Science, Culture, and Time</u> (Ann Arbor: University of Michigan Press, 1995) 157.

⁴¹ Ibid. 141.

ologists—that societies consist of both people and artifacts...objects are a cause, a medium and a consequence of social relationships" (my emphasis). 42

French sociologist Bruno Latour, has argued for a reconsideration of the role that objects, or "things nonhuman," play in social processes. 43 For Latour 'things nonhuman' are comprised of both: "matters of fact," physical objects; and "matters of concern," abstract concepts. 44 He emphatically opposes notions of "subjectivity" and "objectivity" which define Modernist thought and which he claims have led to a two equally invalid beliefs about the relationship between society and objects; a) that objects are "nothing" but "the white screen onto which society projects its cinema" and, b) that objects are "so powerful that they shape human society." Instead Latour argues that 'things nonhuman' actively mediate social relations and should be considered "full-fledged social actors." Furthering this claim he calls for a revolution of thought which considers society as "a collective of human and nonhumans."47 Latour's outlook is widely known as Actor-Network-Theory, or ANT. ANT is an analytic model that traces the social through all its modalities (or relational networks) and attempts to do away with distinctions between human and nonhuman actors thereby supplying a more encompassing and comprehensive view of society.

HOW THINGS THING

The theoretical foundation of ANT, that *things have agency*, is perhaps more radical than the methodology itself. Consider for example, the entanglement of concerns around an object like a bottle of water. Bottled water, of the ubiquitous PET variety, may have been designed in response to a legitimate

⁴² Stephen Harold Riggins, The Socialness of Things: Essays on the Socio-Semiotics of Objects, Approaches to Semiotics 115 (Berlin; New York: Mouton de Gruyter, 1994) 1.

⁴³ Bruno Latour, <u>We Have Never Been Modern</u>, trans. Catherine Porter (Cambridge, Massachusetts: Harvard University Press, 1993).

⁴⁴ Bruno Latour, <u>Reassembling the Social: An Introduction to Actor-Network-Theory</u>, Clarendon Lectures in Management Studies (Oxford; New York: Oxford University Press, 2005).

⁴⁵ Latour, We Have Never Been Modern 53.

⁴⁶ Bruno Latour, "A Collective of Humans and Nonhumans," <u>Technology and Values: Essential Readings</u>, ed. Craig Hanks (Oxford, UK; Malden, MA: Wiley-Blackwell, 2010) 59.

⁴⁷ Ibid.

need for access to clean and portable water. Natural disasters like earth-quakes, landslides and hurricanes, are extreme situations where local drinking water supplies can become contaminated and potable water needs to be distributed to a large numbers of desperate people. Under these conditions bottled water is an effective and appropriate solution. However, the inherent material properties which make bottled water a convenient solution in this context also make it convenient in every other context as well. Convenience in this case, outshines other 'matters of concern'—the environmental impacts of manufacture and disposal, for example—to the unfortunate effect that bottled water has become an accepted and persistent part of our material culture.

Perhaps more important than the material implications of bottled water use, are the hermeneutic implications, the ways that bottled water use can lead to various assumptions and interpretations about water itself. First, that locally provided tap water is unclean or unsafe to drink, which fosters attitudes of mistrust of local infrastructures and an erosion of community. Secondly, that water, a basic necessity for life, can be commodified, which raises serious ethical questions about accessibility in a world where water scarcity is already a global reality. This situation is described by Carlo Velozzi and Ezio Manzini as "the crisis of common goods," which is marked first by the "desertification" of public goods and then by their subsequent "marketisation"

This example clearly supports Latour's theory that objects are not neutral in negotiating their meaning but are involved in the social processes which determine meaning in both concrete and abstract ways. Furthermore, these complex entanglements of 'matters of concern' and 'matters of fact' result in networks of relations which "are at once pliable and durable; they can be shaped very quickly but, once shaped, last far longer than the implications that fabricated them." In other words, the relational network of

⁴⁸ Carlo Vezzoli and Ezio Manzini, Design for Environmental Sustainability (London: Springer, 2008) 22.

⁴⁹ Latour, "A Collective of Humans and Nonhumans," 57.

actions, interpretations, and things that arise from bottled water ensure its stable and continued presence in the material world. To illustrate this point, due to its material properties "bottled water" aligns itself with other similar products and the networks of ideas and practices to which they belong, such as "plastic packaging." In the case of bottled water, these entangled networks lead to other discernible changes within our material world which are a reflection and a perpetuation of the ways that bottled water mediates human relations. For example: the slow but marked disappearance of communal drinking fountains from public architecture; or, the proliferation of supporting apparatuses like recycle centers, recycling bins, and the ethos of recycling found in communities where the material realities of bottled water use have become 'matters of concern.' This is directly opposed to the position that the material world is within "human" control to be reformed and reworked by the collective at will, rather once an object is released upon the world it becomes an automaton, generating its own network of ideas and things or attaching itself to existing ones.⁵⁰

Latour refers to these socially entangled objects as "socio-technical imbroglios"⁵¹ or "quasi objects,"⁵² a term he borrows from his teacher, Michel Serres:

The object becomes[...] a quasi object, which traces or makes visible the relations that constitute the group through which it passes, like the token in a children's game. A quasi object that nonetheless remains a useful technological object, even a high-tech one, directed toward the physical world. It often happens that the most sophisticated tools play their main role socially but without losing their objective purpose. ⁵³

By following "quasi objects" through society Latour traces the relations which inform, transform and perform social realities. As a form of socio-

⁵⁰ Bruno Latour and Madeleine Akrich refer to this as conscription in: Madeleine and Bruno Latour Akrich, "A Convenient Vocabulary for the Semiotics of Human and Nonhuman Assemblies," Shaping Technology/ Building Society, eds. Weibe E. Bljker and John Law (Cambridge, Massachusetts and London, England: The MIT Press, 1994, 1996) 261.

⁵¹ Latour, "A Collective of Humans and Nonhumans," 52, 54.

⁵² Latour, We Have Never Been Modern 51-55.

⁵³ Serres and Latour, Conversations on Science, Culture, and Time 161.

logical inquiry, it connects the material dimensions of objects to their more immaterial or social dimensions.

Martin Heidegger's tautological phrase, "the thing, things"⁵⁴ suddenly appears comprehensible, in this context. As both he and Latour note, early senses of the word thing were 'meeting' or 'gathering' especially pertaining to a gathering to deliberate on a contested matter.^{55, 56} Latour's theory provides insight into how things shape, gather, transform, and mediate social relations and forces one to "rethink anew the role of objects in the construction of collectives."⁵⁷

Without engaging in the full literature, I offer this section as a short overview of Latour's perspective.⁵⁸ The following two sections will expand on this brief research node.

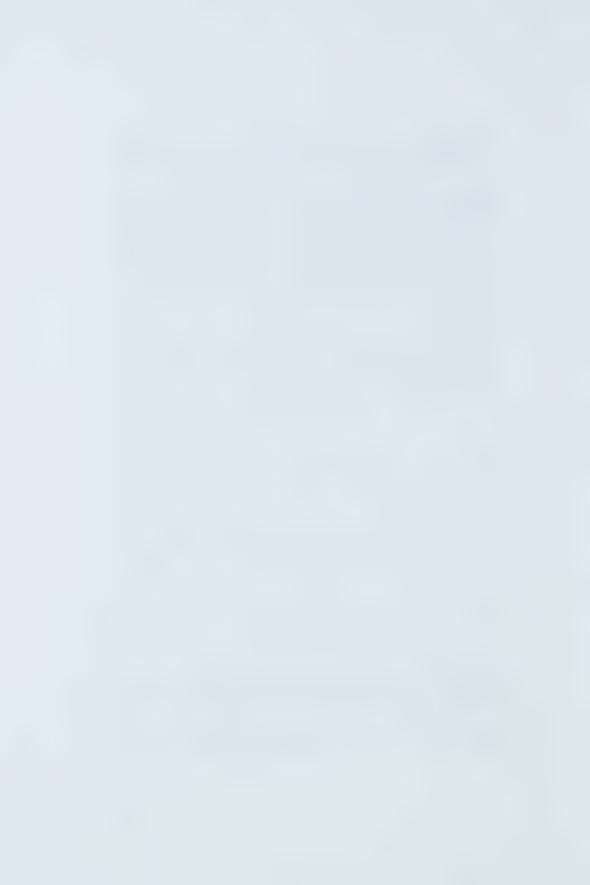
⁵⁴ Martin Heidegger, Poetry, Language, Thought, [1st ed. (New York,: Harper & Row, 1971) 174, 177.

⁵⁵ Ibid. 174.

⁵⁶ Bruno Latour, "From Realpolitik to Dingpolitik or How to Make Things Public," Making Things Public, eds. Bruno Latour and Peter Weibel (Cambridge, Mass. and London, England: MIT Press, 2005) 12-13.

⁵⁷ Latour, Ww Have Never Been Modern, 55.

⁵⁸ For a comprehensive survey on ANT see; John Law and John Hassard, <u>Actor Network Theory and After</u>, The Sociological Review Monographs (Oxford England; Malden, MA: Blackwell/Sociological Review, 1999).



"WHAT THINGS DO": AFFORDANCE, AFFECT, AGENCY

The previous section "How Things Thing" charted the role of objects in assembling social reality, revealing that "artifacts are not neutral intermediaries" or simple carriers of signs, but that they mediate our actions and set patterns of behavior which in turn shape human existence.⁵⁹ Interaction design is an expanding field of research, due in part to the importance of human-computer interactions in new digital technologies. 60,61 However interaction design has been defined more broadly by Richard Buchanan to include "how human beings relate to other human beings through the mediating influence of products."62 Buchanan's definition though slightly broader, does not fully represent the ways in which objects shape the social, it merely suggests that objects do mediate social interactions. In a short survey of various perspectives on how objects influence the social, Jane Bennett, notes that, "a thing has power by virtue of its operating in conjunction with other things."63 In other words, objects have influence through the defining processes which take place in interaction. This section will examine more closely the nuances of interaction between humans and objects and explore the "curious ability of inanimate things to animate, to act, to produce effects dramatic and subtle."64 Three concepts-affordance, affect, and agency—will aid in uncovering the mechanics of how objects mediate social interaction in a material way.

'Affordance' is not an uncommon term in design thanks in part to its introduction by Donald Norman in his book *The Design of Everyday Things* (1990).⁶⁵

⁵⁹ Peter-Paul Verbeck, "Materializing Morality: Design Ethics and Technological Mediation," <u>Science</u>, <u>Technology</u>, & <u>Human Values</u> 31.3 (2006): 364.

⁶⁰ This title is borrowed from: Peter-Paul Verbeek, <u>What Things Do.</u> trans. Robert P. Grease (University Park, Pennsylvania: The Pennsylvania State University Press, 2005).

⁶¹ Kristina Niederrer, "Designing Mindful Interaction: The Category of Performative Object," <u>Design Issues</u> 2007; 6.

⁶² Cited in: Ibid.

⁶³ Jane Bennett, "The Force of Things: Steps toward an Ecology of Matter," <u>Political Theory</u> 32.3 (2004): 354. 64 Ibid.: 361.

⁶⁵ Donald A. Norman, <u>The Design of Everyday Things</u>, 1st Basic paperback, ed. (New York: Basic Books, 2002) 9.

"All around us language replaces experience. The sign, so soft, substitutes itself for the thing, which is hard. I cannot think of this substitution as equivalence. It is more of an abuse and a violence. The sound of a coin is not worth the coin; the smell of cooking does not fill the stomach; publicity is not the equivalent of quality; the tongue that talks annuls the tongue that tastes or the one that receives or gives a kiss."

-Michel Serres, Conversations on Science, Culture and Time p.132

However, 'affordance' originates from James J. Gibson, a perceptual psychologist, who coined the term in 1977 to promote an ecological or relational theory of how "animals" (this includes humans) perceive and make use of the potentialities of "substances," "surfaces" and "objects" within their environment. 66 Gibson posited that perceiving affordances within our environment is largely an effect of our physical or bodily relation to that environment. For example, a low flat rock may afford a place to sit for a child, but due to proportional—or, relational—differences the same rock might not be perceived as a-place-to-sit by an adult. According to Julka Almquist and Julia Lupton, Norman's introduction of the term to design studies abandoned the relational or ecological aspects of Gibson's original theory, promoting a more limited conception of affordances as a means of controlling human-object interaction or programming "ideal uses." In complement to 'affordance' is the notion of 'constraint' — while affordances invite possible uses, constraints disallow or discourage unfavorable possible uses. Norman's affordances and constraints have in many ways defined the field of 'user-centered design.'68 Almquist and Lupton suggest that design has outgrown the limited field of utility and should now be prepared to apply the concept of affordance to how human-object interactions afford "meaning."69

Kristina Niederrer has explored how objects can promote "mindful" humanhuman interactions through embedded functions which manifest as affordances (although she does not explicitly use the term).⁷⁰ Niederrer defines "mindfulness" as "a state of both awareness and attentiveness"⁷¹ and indicates that this research was undertaken to explore how products can promote a more "socially-reflective" approach to consumption.⁷² Her "Social

⁶⁶ James J. Gibson, "The Theory of Affordances," <u>Perceiving, Acting, and Knowing: Toward an Ecological Psychology</u>, eds. Robert Shaw and John Bransford (Hillsdale, New Jersey and New York: Lawrence Erlbaum Associates; distributed by the Halsted Press Division, Wiley, 1977) 67.

⁶⁷ Almquist, "Affording Meaning: Design-Oriented Research from the Humanities and Social Sciences," 10. 68 Ibid.: 7.

⁶⁹ Ibid.

⁷⁰ Kristina Niederrer, "Designing Mindful Interaction: The Category of Performative Object," Ibid. 2007.

⁷¹ Ibid.: 8.

⁷² Ibid.: 17.

Cups"(1999) had smooth rounded bottoms, preventing users from setting the cups down. A "connector" on the side of each cup allowed for three or more cups to link together forming a stable arrangement and requiring the users to "collaborate" in this task.

Though she frames her arguments around "functions" rather than affordances, affordance theory enhances the embodied aspect of the experience produced by the "Social Cups." Within the affordances and constraints presented by the cups, there lies an essential structure which promotes the "mindful" engagement she seeks. She notes, that attentiveness to the experience arises from a disruption of function (through constraint).⁷³ This forces the "cup" from a position in the background of the experience into the foreground. Philosophically, there are negative connotations for the moments when objects rupture everyday experience. Martin Heidegger's well-known hammer analogy, is intended to describe how technology, or "things-in-use can be understood as mediators of human-world relationships."74 According to Heidegger's theory, there are two modalities in which 'things-in-use' can be present to human beings. In the first relationship, the object is in a state of "readiness-to-hand" (zuhandenheit) the object withdraws from our direct consideration; in the case of Heidegger's hammer, attention is not directed at the hammer itself in the act of hammering a nail, but rather towards the nail. Only when an object, the hammer in this case, fails or malfunctions does it require attention again. In this second state the object is "[no longer] able to facilitate a relationship between a user and his or her world anymore," a state that Heidegger names "present-at-hand" (vorhandenheit).75 This state of being 'present-at-hand' is framed by Heidegger in negative terms, as a rupture of the human-world relationship⁷⁶ but vorhandenheit can occur in human-object interactions where the object simply behaves in an unexpected way. In this case, the constraint, or the "rupture" caused by the

⁷³ Ibid.: 8-9.

⁷⁴ Verbeek, "Materializing Morality: Design Ethics and Technological Mediation," 364.

⁷⁵ Ibid.

⁷⁶ The negative connotations of Heidegger's present-at-hand are similarly discussed in: Don Ihde, "A Phenomenology of Technology and Values: Essential Readings, ed. Craig Hanks (Chichester, UK; Malden, MA: Wiley-Blackwell, 2010).



6 Kristina Niederrer, "Social Cups" (1999). Source: Niederrer, Kristina. "Designing Mindful Interaction: The Category of Performative Object." Design Issues 2007: 3-17. Print

inability of the cup to be set down, presents opportunities for new social formations or collaborations to occur. Embedded within the materiality of the cup is a kind of social affordance, the cups could be said to 'afford' social interaction.

'Affect' originated in the philosophy of Baruch Spinoza, and was later adopted by Gilles Deleuze in his own unique analysis of Spinoza's *Ethics*.⁷⁷ 'Affect' as it was appropriated by Deleuze refers to the byproduct of encounters between bodies⁷⁸ —"a body can be anything; it can be an animal, a body of sounds, a mind or an idea; it can be a linguistic corpus, a social body, a collectivity."⁷⁹ The byproduct of these enco unters is either the

⁷⁷ Nigel Thrift, "Intensities of Feeling:Towards a Spatial Politics of Affect," <u>Geografiska Annaler, Series B. Human Geography</u>, Vol. 86, No. 1 (2004): 62, (September 11, 2011) http://www.jstor.org/stable/3554460>. See also:Gilles Deleuze, <u>Expressionism in Philosophy</u>, (San Francisco: City Lights Books, 1988).

⁷⁸ Thrift, "Intensities of Feeling:Towards a Spatial Politics of Affect," 62.

⁷⁹ Deleuze, Spinoza, Practical Philosophy 127-128. Cited in: Thrift, "Intensities of Feeling:Towards a Spatial Politics of Affect," 63.

increase or diminishment of the body's capacity to act. ^{80,81} Furthermore, as Susan Ruddick notes "it [affect] becomes the mechanism by which the subject itself can be undone, 'the opening up of the subject to that which is bigger than it,' the co-production of something new." Applying "affect" to an analysis of Niederrer's "Social Cups" indicates how affordance might afford meaning. The negative 'affect,' or discord introduced by the disruption of capability (the non-stand-able cup) is overcome through collective effort, the byproduct of this encounter is thus an enhancement of the relations among the group. According to Ruddick a major feature of Spinoza's Ethics was the belief that, "humans must collaborate with one another to enhance their *potentia*, their power to act" ⁸² and the major outcome of these collaborations was the "production of knowledge." ⁸³

'Agency' has been briefly covered in "How Things Thing" (this document) with respect to Bruno Latour's ANT. As was noted ANT emphasizes the role of objects as social agents which mediate relations. As Latour is careful to distinguish that a mediator is not neutral: "a mediator...is an original event and creates what it translates as well as the entities between which it plays a mediating role." These translations or traces are the 'affects' which are dispersed in interaction and made possible through 'affordances.' Niederrer's "Social Cups" require a renegotiation of behavior and this promotes reflection on the particular way that the cups mediate relations between actors. The cups become "present" as active agents within the group, calling into question who or what is the main protagonist of the interaction.

⁸⁰ Ibid.: 62.

⁸¹ Susan Ruddick, "The Politics of Affect: Spinoza in the Work of Negri and Deleuze," <u>Theory, Culture & Society</u> 27 (2010): 27, https://tcs.sagepub.com/content/27/4/21.

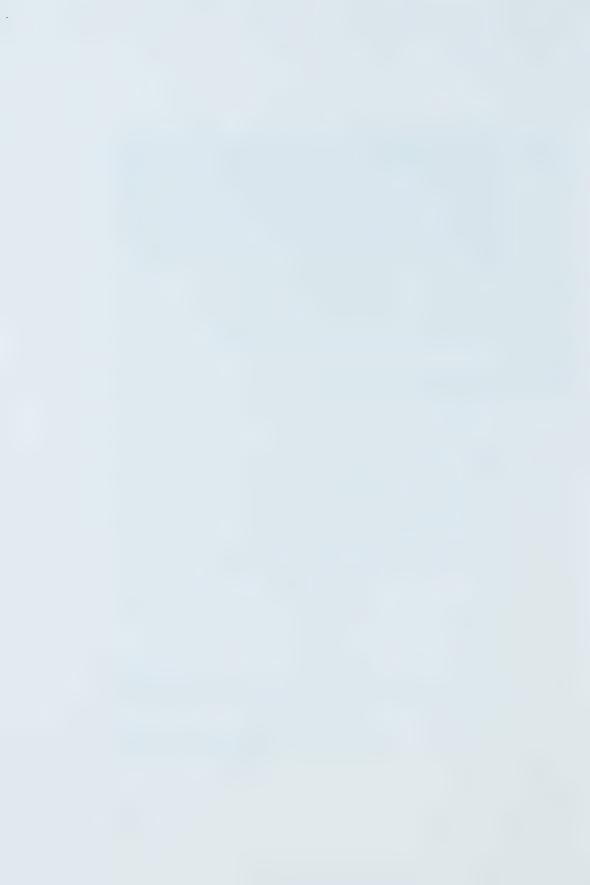
⁸² Ibid.: 24.

⁸³ Ibid.: 28.

⁸⁴ Latour, Reassembling the Social: An Introduction to Actor-Network-Theory.

⁸⁵ Latour, We Have Never Been Modern 78.

The terms 'affordance,' 'affect' and 'agency' as they are related here and elaborated on through the example of Niederrer's "Social Cups" highlight areas of fertile intersection, wherein each term could be said to mutually develop one another. Furthermore, these concepts provide clearer understanding of the mechanics of encounters between humans and things, how these interactions can become meaningful enactments of alternative social worlds.



THE RHETORIC OF THINGS

As has been noted throughout this text the material environment does more than provide the backdrop in which the everyday lives of humans are acted out. Unbeknownst to their human counterparts 'things nonhuman,' from the smallest tool to large buildings and vast landscapes are quietly influencing individual actions and experiences and shaping societal behaviors, values and beliefs. In this light design is implicitly involved in social processes at the level of micro-relations (actions, experiences) and macro-relations (contextual, interpretive)⁸⁶. As such designers must be cognizant of this role and consider the ethical consequences of acknowledging artifacts as " a framing and communicative medium involved in social practice" which can be "used for transforming, storing or preserving social information." ⁸⁷

ETHICS IN DESIGN STUDIES

The history and theory of design is a relatively young and emerging field of research which borrows heavily from various branches of the humanities and social sciences; sociology, psychology, anthropology, science and technology studies, engineering and human ecology to name but a few. The cross-pollination of these various branches of study, are a reflection of the interdisciplinary nature of design in practice. This interdisciplinarity and the presence of designed objects in every aspect of contemporary life has situated design as a field that is particularly poised to address the complexity of the interrelated ecological, social, cultural, economic and technological problems posed by the environmental crisis. To an extent, the design profession has been up to the challenge, and the creativity and innovation of designers has changed many aspects of the way we make things; Eco-Efficiency, Life Cycle Design, Design for Disassembly, Design for Durability, and so on, are all approaches to the design and manufacturing of products

⁸⁶ See for example this document "What Things Do"for how objects mediate actions and experiences and "How Things Thing" for how human-object interactions lead to larger macro-scale values and beliefs.

⁸⁷ Christopher Tilley, "Interpreting Material Culture," <u>The Meaning of Things</u>, ed. I Hodder (London: Unwin Hyman, 1989) 189.

"When the first tremors of the Apocalypse are heard, it would seem that preparations for the end should require something more than simply using a different kind of light bulb..."

-Bruno Latour, "Will Non-Humans Be Saved? An Argument in Ecotheology" p.5

that emphasize reducing the environmental impact of design in quantifiable ways.

It is becoming apparent, however, that simply changing the way things are produced is not enough to slow environmental degradation and the depletion of resources. As it is succinctly put by Nathan Stegall, sustainability "has emerged as an extremely complex sociological dilemma, where the lifestyle we've adopted is rapidly eroding our ability to survive."⁸⁸ In other words, the transition to sustainability will require a massive and radical shift of social and cultural values, attitudes and beliefs. Stegall further states "the time has come to develop a unifying ecological design philosophy" that will "ensure that new artifacts combine materials and resources in environmentally conscious and beneficial ways, at the same time, ensuring the values and lifestyles communicated through artifact rhetoric serve to promote an ecologically sustainable society."⁸⁹ This observation echoes the sentiments of many design scholars but is perhaps best encapsulated by the major contributions of Victor Papanek, ⁹⁰ Victor Margolin and Richard Buchanan behave argued for an ethics of design.

In "Declaration by Design," Richard Buchanan uses Aristotle's definition of *rhetoric* to describe the way in which design has "directly influenced the actions of individuals and communities, changed attitudes and values, and shaped society in surprisingly fundamental ways." For Buchanan the *rhetoric* of design is a form of persuasive communication with an intrinsic ability

⁸⁸ Nathan Stegall, "Design for Sustainability: A Philosophy for Ecologically Intentional Design," <u>Design Issues</u> 29 2, 2006; 57.

⁸⁹ Ibid.: 58.

⁹⁰ See for example: Victor J. Papanek, <u>The Green Imperative: Ecology and Ethics in Design and Architecture</u> (New York: Thames and Hudson, 1995).

⁹¹ See for example: Victor Margolin, <u>The Politics of the Artificial: Essays on Design and Design Studies</u> (Chicago: University of Chicago Press, 2002).

⁹² See for example: Richard Buchanan and Victor Margolin, <u>Discovering Design : Explorations in Design Studies</u> (Chicago: University of Chicago Press, 1995).

⁹³ Richard Buchanan, "Declaration by Design: Rhetoric, Argument and Demonstration in Design Practice," <u>Design Discourse: History, Theory and Criticism</u>, ed. Victor Margolin (Chicago and London: University of Chicago Press, 1989) 93.

to shape society and "[set] patterns for new action." From these conjectures it follows that the responsibility of designers extends not only to the materials, processes, functions and end life of products, but also to the inherent arguments made by artifacts about how one should live. Peter Paul Verbeek observes in What Things Do that "ethics is concerned with questions of how one should act (ethics of behavior) as well as with the more classical question of "how to live" (virtue or life ethics)" and design appears to provide a "material answer" to these questions. However, the unpredictable way in which objects can acquire meaning over time and through the lens of different frameworks of knowledge and interpretation, leads one to question to what extent it is possible to design the social and cultural arguments that artifacts make. Also in question is whether it is possible to "design" the kind of reflective engagement required to ensure that these ecological arguments are internalized in socially and culturally meaningful ways.

TOWARDS AN "ETHOS OF THINGS" 96

Acknowledging the role of artifacts in determining actions and behavior, and thus experience and existence, will require a thoughtful reconsideration of the design process and a revisitation of the definition of "good design." Mainstream designers tend to view design as a more or less democratic process governed by socio-economic forces; in this estimation "good" design perseveres, replicates, and generates large financial returns, while "bad" design disappears, is replaced or outmoded, and fades from material life. But, as Bruno Latour clearly puts it:

If the whole fabric of our earthly existence has to be redesigned in excruciating details; if for each detail the question of good and bad has to be raised; if every aspect has become a disputed matter of concern and can no longer be stabilized

⁹⁴ Ibid., 93.

⁹⁵ Verbeek, What Things Do 212.

⁹⁶ Cameron Tonkinwise, "Ethics by Design or the Ethos of Things," <u>Design Philosophy Papers: Collection Two.</u> ed. Anne-Marie Willis (Ravensbourne, Australia: Team D/E/S Publications, 2005).

⁹⁷ Here I am referring to the Good Design Movement of the mid-twentieth century, which was characterized by an emphasis on form and function. It has been the subject of an ongoing exhibition at MoMa curated by Juliette Kinchin titled "What was Good Design? MoMa's Message 1944-1956" which revisits MoMa's role in the modernization of everyday life.

as an indisputable matter of fact; then we are obviously entering into a completely new political territory. 98

Cameron Tonkinwise frames the issue appropriately using Latour's theory to establish a case for what he terms a "materialised ethics"—a set of principles which goes beyond the ethics of the designer or their clients, to the ethos of the things themselves.⁹⁹ He states:

Things must be acculturating or ethos-gathering. What things design, that is to say, the intentions, actions, understandings and relations that things are designed to design, that they design beyond what their designers intended, and that they are redesigned to design by those who use them, must be a vital part of any ethos with a future.¹⁰⁰

In other words, if objects can be understood as already "being ethical," as a part of the social process, it follows that they also have the ability to design ethical (or unethical) ways of being; Latour himself might refer to this as the "politics of things." It is worthwhile to consider Tonkinwise's ethos in the context of Aristotle's initial theory of rhetoric. Rhetoric as "persuasive communication" is constituted by three types of appeals: 103 ethos, ethics "as lived rather than professed;" 104 logos, through reason or logic; and pathos, through emotional petitions. Tonkinwise notes a UNEP study which found that young people today are greatly concerned about the "protection of environment, animal testing and human exploitation" yet they continue to consume products without consideration for the consequences of their actions. 105 It is clear that both logos and pathos have not resulted in any real change in behavior; the transition to more sustainable lifestyles is happening slowly not due of a lack of concern or a lack of information, but rather through a lack of ethos. Aristotle's term for this gap between values

⁹⁸ Bruno Latour, "A Cautious Prometheus? A Few Steps toward a Philosphy of Design," <u>Design History Society</u>. <u>Networks of Design</u> (Falmouth, Cornwall: 2008), vol., 11.

⁹⁹ Tonkinwise, "Ethics by Design or the Ethos of Things," 50.

¹⁰⁰ Ibid. 51.

¹⁰¹ Ibid., 51.

¹⁰² Latour, "A Collective of Humans and Nonhumans," 53.

¹⁰³ Christof Rapp, Aristotle's Rhetoric, ed. Edward N. Zalta (2010), September 9, 2011 < URL = http://plato.stanford.edu/archives/spr2010/entries/aristotle-rhetoric/>.

¹⁰⁴ Tonkinwise, "Ethics by Design or the Ethos of Things," 49.

¹⁰⁵ Ibid., 50, 57.

and actions is *akrasia*, "knowing the right thing to do, yet not doing it." ¹⁰⁶ Tonkinwise's suggestion that objects become "ethos-gathering" as means of overcoming this gap, leads one to question whether it is possible to ensure a continuity of ethos from the intention of the designer to the ways that objects are interpreted in use.

According to Tonkinwise's "ethos of things" design can be defined as the conscious act of "delegating" the task of ethics(acculturation) to things. Latour uses the term "delegation" to describe the process by which nonhuman actors become substitutes for human actors; for example, a speed bump or a traffic light act as substitutes for a police officer and the job of providing order is delegated to a 'nonhuman.'107 Latour further suggests that through 'delegation,' artifacts can be seen to "stabilize social negotiations" and ensure the continuity of actions, values and beliefs over time. 108 Latour describes the mechanics of 'delegation' through the "de-scription" of a few everyday things in an important essay "Where are the Missing Masses? The Sociology of a Few Mundane Artifacts."109 Latour frames the discussion through the language of computer programming, but his terms, "programming" and "anti-programming," are analogous to the somewhat more familiar terms in design studies "affordance" and "constraint" used by Donald Norman in The Design of Everyday Things. 110 Artifacts are seen to invite or inhibit (afford or constrain) certain forms of interaction through their material attributes. Latour demonstrates that designers anticipate these kinds of interactions and in-scribe "programs for action" which are manifested in an object's material affordances or constraints. To use an example cited by Tonkinwise,¹¹¹ dual flush toilets that promote water saving behaviors by requiring the user to pull-up on the handle for a full flush have an embed-

¹⁰⁶ Ibid., 50

¹⁰⁷ Bruno Latour, "Where Are the Missing Masses? The Sociology of a Few Mundane Artifacts," <u>Shaping Technology/ Building Society</u>, eds. Weibe E. Bljker and John Law (Cambridge, Massachusetts and London, England: The MIT Press, 1994, 1996) 243.

¹⁰⁸ Latour, "A Collective of Humans and Nonhumans," 58.

¹⁰⁹ Latour, "Where Are the Missing Masses? The Sociology of a Few Mundane Artifacts."

¹¹⁰ Norman, The Design of Everyday Things. Though the origins for the terms "affordance" and "constraint" should be properly attributed to James J. Gibson here: Gibson, "The Theory of Affordances."

¹¹¹ Tonkinwise, "Ethics by Design or the Ethos of Things," 56.

"The spread of design to the inner definitions of things carries with it, not only meaning and hermeneutics, but also morality. More exactly, it is as if materiality and morality were finally coalescing."

- Latour, "A Cautious Prometheus? A Few Steps Toward a Philosophy of Design" p.5

ded ethical structure. People are induced into water-saving behavior due to the constraints introduced by the counterintuitive flushing mechanism. Although the constraints introduced by the flushing mechanism may actually save water, in this schema "ethos" is absent. Some less technocratic dual-flush toilets use a two button flushing mechanism in which the full flush and half flush are indicated graphically, introducing an ethical dimension to the action.

Designers are among those whose job it is to inscribe or author "scripts" and as such are situated at the crossroads of human and nonhuman interactions. When things are considered with an accounting of the social arguments they create, design becomes an implicitly moral activity. As Latour states in a keynote address: "so here is the question I wish to raise to designers: where are the visualization tools that allow the contradictory and controversial nature of matters of concern to be represented?"112 In other words, how can the future social life of an object, its political, social, and environmental consequences, be visualized and accounted for in the design process. There are several factors which make this problematic. First, designers are not outside the social realm, but within it; they too access the world from a position of mediated experience. In other words "the environment with which they[humans] are involved always codetermines the ways in which they can be present to the world and each other."113 To phrase this problem differently, the material environment always consists of objects formed both in the distant and not so distant past—therefore the rhetoric of the past always informs the ways in which we interpret the present and can imagine future scenarios. Design is not an activity in which the world is begun anew from a tabula rasa, rather it is an additive process wherein design can contribute to shifting paradigms only through an accumulation of autonomous socio-technical processes which determine both the uses of objects (practical and socio-symbolic) and the ways they are interpreted. Furthermore,

¹¹² Latour, "A Cautious Prometheus? A Few Steps toward a Philosphy of Design," vol., 5.

¹¹³ Verbeek, What Things Do 112.

objects have "multistable"¹¹⁴ lives and have the potential to generate meaning and contexts of use beyond the scope of their initial purposes or intentions. There are many examples of technologies which have taken on unexpected lives; the telephone for example was initially developed as a hearing aid. This presents difficulties for explicitly anticipating the future character of an object in the design process. Indeed, "inscribing" artifacts with specific programs for action does not guarantee that they will be used in the way they were intended or that those actions will be ethically interpreted. Considering the radical ways in which various objects—the telephone, the television, and the internet, for example—have altered the ways in which human beings are present to one another makes the 'ethos of things' an ever more pertinent discussion for design.

There is no obvious answer to Latour's question, rather designing what design *designs*, requires careful consideration. The research blueprint outlined in the first essay on Atelier Bow-Wow suggests a way of potentially addressing some of these issues. By attentively observing relations between people and things, as well as making inquiries into the nature of these relations through experimental arts-based practices, this research model fosters an approach characterized by an attitude of care. This attitude permits a clear view of the present and a prudent regard for the future. Furthermore, it acknowledges "design as the activity in which[...]can help deliver us from the 'actual...to the *eventual everyday*."¹¹⁷

¹¹⁴ Ibid. 118

¹¹⁵ Verbeek, "Materializing Morality: Design Ethics and Technological Mediation," 367.

¹¹⁶ Verbeek, What Things Do 217.

¹¹⁷ Dilnot, "Ethics in Design: 10 Questions," 188.

"At the very least, I hope I have convinced the reader that, if we are able to meet our challenge, we will not meet it by considering artifacts as things. They deserve better. They deserve to be housed in our intellectual culture as full-fledged social actors."

-Bruno Latour, "A Collective of Humans and NonHumans" p.59

THE SOCIAL OBJECT(IVE)

Each essay in this collection could be said to be making a statement or raising a question about design. This final essay uses these as the foundation for the formation of a new proposition—the *social object*.

WHAT IS A SOCIAL OBJECT?

A social object explores the potential of objects as social actors. A social object, facilitates new kinds of interactions between people and things, and calls into question who or what is the protagonist of a space. As established previously, all objects have social dimensions, even the most mundane or everyday things. Social objects are differentiated from these by the ways in which they are present as active agents in the interactions they facilitate. A social object is determined by what it does, how it actively shapes human behavior and transforms relations between actors.

In the context of this document and the concurrent exhibition, the *social* object is a research tool which poses the question: "How can an object become a protagonist?"—or, to put it even more simply: "How does an object become a subject?"

THE "JIG"

The exhibition which accompanies this document contains two *social objects* which explore the role of objects in the creation of social space. Borrowing a metaphor used by Atelier Bow-Wow in their book *Echo of Space/Space of Echo* in which "all that temporarily anchors people in a stable relationship," or what could be termed a spatio-temporal arrangement, is compared to the jig (the jig in this case, meaning a device that holds or positions a piece of work and guides the tools operating on it). Jigs, as they note, have no typical form, nor are they 'named,' they are non-specific forms that enable precise actions; furthermore they "are particular as they can perform only when

¹¹⁸ Bow-Wow, Echo of Space/Space of Echo 87-88.

they are put in a precise relationship with other tools." The "jig" concept also extends to the way in which the project can be viewed as a singular experience, a kind of experimental 'representation of space.'

There are three organizing principles which help to compose the interaction facilitated by *Social Object 001* and *Social Object 002*.

Light has social agency. The evolution of human societies is fundamentally bound up with the ability to manage sources of light. In this sense light is both a technical artifact and a social agent. Sitting at campfire with others in the darkness of a wild place allows one to conceive of the social space that fire provides. The fire cocoons its human subjects in its warmth and light, outside its sphere the night appears darker, colder and more hostile. Fire could be said to be at the heart of dwelling, marking the beginning of human culture. ¹²⁰

Candlelight and lamplight follow, but light as a purveyor of social interaction remains:

The evening lamp on the family table is also the center of a world. In fact the lamp-lighted table is a little world in itself, and a dreamer-philosopher may well fear lest our indirect lighting cause us to lose the center of the evening room. ¹²¹

In Gaston Bachelard's depiction above, the lamp becomes the central protagonist in the organization of time (the evening) and space (the room). The lamp, in this case would qualify as one of Albert Borgmann's "focal things," which he defines as "things which draw together human involvements, things that invite engagement with themselves and what they make possible." Not surprisingly the Latin word for hearth—symbol of home and family life—which this imagery recalls, is *focus*. 123 Light, in this context,

¹¹⁹ Ibid. 87.

¹²⁰ See for example Fire, the spark that ignited a civilization, check title and author.

¹²¹ Gaston Bachelard, The Poetics of Space, trans. Marie Jolas (New York: The Orion Press, 1964) 171.

¹²² Verbeek, What Things Do 184.

¹²³ Albert Borgmann, "Focal Things and Practices," <u>Technology and Values: Essential Readings</u>, ed. Craig Hanks (Chichester, UK; Malden, MA: Wiley-Blackwell, 2010) 123.



7 "Social Object 001." 2011.

gathers and assembles its human subjects revealing its fundamentally social nature.

Gas and electric lighting innovations mediate further, changing the pace of everyday life on individual and societal scales. In *Understanding Media* McLuhan argues that even before electric light is imbued with "content" (as in advertisements) it is already mediating.¹²⁴ Furthermore "the 'message' of any medium" he states "is the change of scale or pace or pattern it introduces into human affairs."¹²⁵ This change is chronicled by Murray Melbin in *Night as Frontier*, which presents the progression of humankind's technological capacity to manage sources of light (from fire to electric light) as a key determinant in the process he calls the "colonization of the night."¹²⁶ A variety of practices characterize this colonization, from the solitary work or

¹²⁴ Marshall McLuhan, <u>Understanding Media</u>; <u>The Extensions of Man</u>, 1st MTT Press Ed. ed. Cambridge and London: MTT Press, 1994) 8-9.

¹²⁵ Ibid. 8.

¹²⁶ Murray Melbin, Night as Frontier: Colonizing the World after Dark (New York and London: Free Press; Gollier Macmillan, 1987) 2-28.

leisure activities of 'night owls,' to social gatherings and urban 'night life,' and global changes in labour practices through the introduction of 'night shifts'. The night is portrayed as a profitable new frontier, a span of time to be commodified. Moreover, Melbin's studies present an alternative social world which is less populated, surprisingly friendlier, and growing in convenience as more service sectors seek to capture the business opportunities presented by these new social practices. Everyday life is thus extended into the realm of the Night, contributing to the increasing velocity of experience and changing the character of everyday life into what Latour calls the "simultaneous present." 127

Examining light genealogically, each technological evolution yields a reduction in its social character. Open fires and ovens lose their spatiality when their actions or scripts become divided—cooking and heating are separated from lighting by the introduction of candles and lamps. Electrification further divides fire and light. With this division light loses its temporality (light can be anywhere at anytime) and its corporeality (sight is divided from touch). It is no longer necessary to carefully shield a hot flame to light a wick, electricity burns without fire. Light is no longer a 'thing' which sputters or thrives depending on our behav-





8,9 "Social Object 001," 2011.

ior toward it, it is everywhere, at the ready and in unlimited supply. Electric light makes it possible to flip a switch on or off and quickly forget about it.

Occasionally, the spatial and temporal qualities of light are reclaimed, either by necessity or by preference. Blackouts are one cause for a return to candle-

¹²⁷ The "simultaneous present" is Latour's term for our prevailing model of time which has shifted from a model of linear time, chronos, to a model of simultaneous time. This model which, he also calls the time of space, collapses time, "a series of successions" and space, "a series of simultaneities"—everything becomes contemporary. From Latour, "From Realpolitik to Dingpolitik or How to Make Things Public," 29-30.



10 "Social Object 002," 2011

light. Tellingly, restaurants and cafes employ candlelight as a way of enhancing the ambience of a space, each table often lit by a single candle. The light emitted by a candle (however slight) provides a center for each grouping and delineates the boundaries of social space. As Christopher Alexander notes in *A Pattern Language* a space defined by a "pool of light" can be equated to a world: "think of a park bench, under a solitary light, and the privacy of the world which it creates for a pair of lovers." According to Alexander "pools of light" tend to result in human groupings whereas uniform lighting has a tendency to repel formations of people in space. 129

The intrinsic social agency of light, its significant role in human perception, and ability to delineate space and time, make it an ideal resource for exploring the affective potential of an object as a social mediator.

The everyday becomes unknown. Social Object 001 and Social Object 002 seek to retrieve the social character of light through their specificity. Each is imbued with a kind of persona, an attitude, which structures or mediates the relations which they enable. In brief, Social Object 001 is an articulated arm lamp with a secret to impart, if it can be coerced into giving it up. This can only be achieved in conditions of silent concentration. Social Object 002 is a pendant lamp with a much more social personality, it refuses to operate in silence. Social Object 001 and Social Object 002 express alternative realities which echo everyday situations; a work desk lit by a single task light, and a pendant lamp suspended over a table and chairs. This echoing connects them to a material past or the everyday scenes which one experiences in the course of daily life. However, their sensitivities, the ways in which the lights are uniquely responsive to sound, catapults them from a position within the background of human actions to a position in the foreground. The scene, which at first, may have appeared mundane becomes "de-familiarized" and the human actors may be moved by curiosity into a consideration of the object itself and what it makes possible.

¹²⁸ Christopher et al. Alexander, <u>A Pattern Language</u> (New York: Oxford University Press, 1977) 1162. 129 Ibid. 1161.





11,12 "Social object 002" pictured in both the 'on' and 'off' state.

As has been discussed Atelier Bow-Wow uses 'making the everyday unknown' as a strategy for observing everyday life, they also apply this principle to *micro public spaces*. By framing the familiar in unfamiliar terms, a kind of emergence occurs which acts as an invitation for engagement with passersby. In *Poetics of Space*, Bachelard uses the term 'emergence' explain the poetic act:

The poetic image is an emergence from language, it is always a little above the language of signification. By living the poems we read, we have then the salutory experience of emerging. This, no doubt is emergence at short range[...] poetry puts language in a state of emergence, in which life becomes manifest through its vivacity. ¹³⁰

Here the poetic act can be seen as a de-familiarization of language, an awakening of "images that had been effaced" a revealing as it were of the "unforeseeable nature of speech," which for Bachelard is ultimately a moment of possibility.¹³¹ What Bachelard describes as 'emergence' is the same strategy as 'making the everyday unknown,' it provides the impetus for a new kind of engagement to take shape, potentially restoring what "had been effaced"—in the case of the two lamps (*Social Object 001* and *Social Object 002*) the social character of light.

The composition of relations. By behaving in an unexpected way, the object takes on an anthropomorphic character and assumes a kind of humanized personality—either temperamental or sensitive. Latour notes that "anthropos and morphos together mean either that which has human shape or that which gives shape to humans." ¹³²

It has been noted throughout this document that encounters between people and things involve the negotiation of various embedded "scripts" for interaction. Through these interactions, humans and things take up a relation with one another. By maintaining a state of being present-at-hand the *social*

¹³⁰ Bachelard, The Poetics of Space xxiii

¹³¹ Ibid

¹³² Latour, "Where Are the Missing Masses? The Sociology of a Few Mundane Artifacts," 235

"To give an object poetic space, is to give it more space than it has objectivity."

Gaston Bachelard, The Poetics of Space. p.202



13 "Social Object 002" in use. 2011

object, retains its position as an active and reactive agent of the encounter. The formation of these relations is by no means predictable—they may be imperfect, incomplete or even impossible to form under certain conditions. However, the virtue of the "jig" is that it gives shape to the encounter, increasing the likelihood of a negotiation to occur between the actors. In these negotiations, the actors (both human and nonhuman) form alliances in order to maintain a state of equilibrium wherein the light is on. THE SOCIAL OBJECT(IVE)

It has been noted that the meaning of the word *expérience* in French is both 'experience' and 'experiment.'¹³³ This is the objective of the *social object*, to explore the nature of the relationship between humans and things by way of experimentation/experience. My hope is that from these experiments/experiences a kind of logic emerges which may reveal the ways in which things gather meaning and structure relations in the social world.

¹³³ Adrian Parr, ed., The Deleuze Dictionary New York: Columbia University Press, 2005-91

At minimum this survey has served to illustrate that designers should be cognizant of the social potential of objects to transform relations. This acknowledgement is accompanied by a significant responsibility to consider the latent capacities of any new design or technology. Ideally, understanding the interactive processes by which objects become meaningful social actors will help designers to "(design) the relations between things and persons" enhancing or proliferating these relations in favorable directions (as opposed to reducing them to "commodity relations" or "utilitarian relations"). ¹³⁴ Key to this process is observing the patterns of relations which constitute everyday life, and doing so with attendant curiosity. Michel Foucault has suggested that curiosity:

...evokes the care one takes for what exists and could exist; a readiness to find strange and singular what surrounds us; a certain relentlessness to break up our familiarities and to regard otherwise the same things; a fervor to grasp what is happening and what passes."

This is the promise of design, to collectively imagine new 'forms of doing' and 'forms of being;' to "(seize) and (realize) the potential of situations...to be transformed" and to be transformed on behalf of, in the interest of or for the project of, *persons*." 135

¹³⁴ Dilnot, "Ethics in Design: 10 Questions," 183.

¹³⁵ Dilnot, "Ethics in Design: 10 Questions," 184.



14 "Social Object 002." 2011



BIBLIOGRAPHY

- Akrich, Madeleine and Bruno Latour. "A Convenient Vocabulary for the Semiotics of Human and Nonhuman Assemblies." Shaping Technology/Building Society. Eds. BIjker, Weibe E. and John Law. Cambridge, Massachusetts and London, England: The MIT Press, 1994, 1996. 259-264.
- Alexander, Christopher et al. . A Pattern Language. New York: Oxford University Press, 1977.
- Almquist, Julia and Julia Lupton. "Affording Meaning: Design-Oriented Research from the Humanities and Social Sciences." *Design Issues* 26 1 (2010): 3-14.
- Bachelard, Gaston. *The Poetics of Space*. La poétique de l'espace (1958). Trans. Jolas, Marie. New York: The Orion Press, 1964.
- Bennett, Jane. "The Force of Things: Steps toward an Ecology of Matter." Political Theory 32 3 (2004): 347-372.
- Borgmann, Albert. "Focal Things and Practices." Technology and Values: Essential Readings. Technology and the Character of Contemporary Life (Chicago: University of Chicago Press, 1984). Ed. Hanks, Craig. Chichester, UK; Malden, MA: Wiley-Blackwell, 2010.
- Bow-Wow, Atelier. Echo of Space/Space of Echo. Trans. Yamamoto, Kumiko. Contemporary Architect's Concept Series. Tokyo: INAX Publishing, 2009.
- Buchanan, Richard. "Declaration by Design: Rhetoric, Argument and Demonstration in Design Practice." *Design Discourse: History, Theory and Criticism.* Ed. Margolin, Victor. Chicago and London: University of Chicago Press, 1989. 91-109.
- Buchanan, Richard, and Victor Margolin. Discovering Design: Explorations in Design Studies. Chicago: University of Chicago Press, 1995.
- Certeau, Michel de. *The Practice of Everyday Life*. Berkeley: University of California Press, 1984.
- Csikszentmihalyi, Mihaly and Eugene Rochberg-Halton. *The Meaning of Things:*Domestic Symbols and the Self. Cambridge, UK: Cambridge University
 Press. 1981.
- Deleuze, Gilles. Expressionism in Philosophy: Spinoza. New York Zone Books 1990.
- ---. Spinoza, Practical Philosophy. San Francisco: City Lights Books, 1988.
- Dilnot, Clive. "Ethics in Design: 10 Questions." *Design Studies: A Reader.* Eds. Clark, Hazel and David Brody. Oxford and New York: Berg, 2009. 180-190.
- Finley, Susan. "Arts-Based Inquiry." *The Sage Handbook of Qualitative Research.* Eds. Denzin, Norman K. and Yvonna S. Lincoln. 3rd ed. Thousand Oaks: Sage Publications, 2005. 681-694.
- Foucault, Michel, and Lawrence D. Kritzman. Politics, Philosophy, Culture: Interviews and Other Writings, 1977-1984. New York: Routledge, 1988.

- Fujimori, Terunobu. "The Origin's of Atelier Bow-Wow's Gaze." Trans. Elchert, Nathan. *Atelier Bow-Wow: Behaviorology*. Eds. Luna, Ian and Lauren A. Gould. New York, NY: Rizzoli, 2010. 122-129.
- Gibson, James J. "The Theory of Affordances." *Perceiving, Acting, and Knowing:*Toward an Ecological Psychology. Eds. Shaw, Robert and John Bransford.

 Hillsdale, New Jersey and New York: Lawrence Erlbaum Associates;

 distributed by the Halsted Press Division, Wiley, 1977. 67-83.
- Hara, Kenya. Designing Desing. Baden, Switzerland: Lars Müller Publishers, 2008.
- Heidegger, Martin. Poetry, Language, Thought. [1st ed. New York,: Harper & Row,
- Ihde, Don. "A Phenomenology of Technics." *Technology and Values: Essential Readings. Technology and the Lifeworld*(Bloomington: Indiana University Press, 1990). Ed. Hanks, Craig. Chichester, UK; Malden, MA: Wiley-Blackwell, 2010. 134-155.
- Kaijima, Momoyo "Made in Tokyo, Internet Version". 2000. Th original Japanese Internet Version first appeared in the online art magazine Artscape, June 1998. August 13 2011. http://www.dnp.co.jp/museum/nmp/madeintokyo_e/mit.html#3.
- Latour, Bruno. "A Cautious Prometheus? A Few Steps toward a Philosphy of Design." *Design History Society: Networks of Design:* (Location.Conference 3 September 2008) 20 April 2010 http://www.bruno-latour.fr/articles/article/112-DESIGN-CORNWALL.pdf
- ---. "A Collective of Humans and Nonhumans." *Technology and Values: Essential Readings.* Ed. Hanks, Craig. Oxford, UK; Malden, MA: Wiley-Blackwell, 2010. 48-59.
- ---. "From Realpolitik to Dingpolitik or How to Make Things Public." Making Things Public. Eds. Latour, Bruno and Peter Weibel. Cambridge, Mass. and London, England: MIT Press, 2005. 14-41.
- ---. Reassembling the Social: An Introduction to Actor-Network-Theory. Clarendon Lectures in Management Studies. Oxford; New York: Oxford University Press, 2005.
- ---. We Have Never Been Modern. Trans. Porter, Catherine. Cambridge, Massachusetts: Harvard University Press, 1993.
- ---. "Where Are the Missing Masses? The Sociology of a Few Mundane Artifacts." *Shaping Technology/ Building Society.* Eds. Bijker, Weibe E. and John Law. Cambridge, Massachusetts and London, England: The MIT Press, 1994, 1996. 225-258.
- Law, John, and John Hassard. Actor Network Theory and After. The Sociological Review Monographs. Oxford England; Malden, MA: Blackwell/ Sociological Review, 1999.
- Lefebvre, Henri. Everyday Life in the Modern World. Communications Series. New Brunswick, N.J., U.S.A.: Transaction Books, 1984.
- Lefebvre, Henri, and Christine Levich. "The Everyday and Everydayness." Yale French Studies 73 (1987): 7-11.
- Lupton, Ellen. Thinking with Type: A Critical Guide for Designers, Writers, Editors, & Students. Design Briefs. 1st ed. New York: Princeton Architectural Press, 2004.

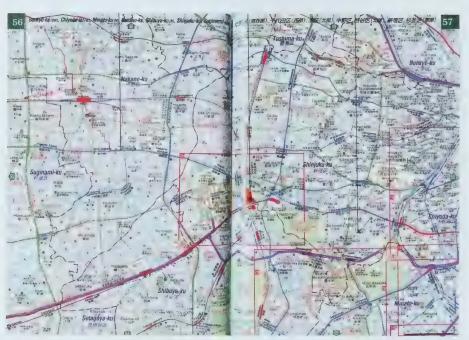
- Margolin, Victor. The Politics of the Artificial: Essays on Design and Design Studies. Chicago: University of Chicago Press, 2002.
- McLuhan, Marshall. *Understanding Media: The Extensions of Man.* 1964. 1st MIT Press Ed. ed. Cambridge and London: MIT Press, 1994.
- Melbin, Murray. Night as Frontier: Colonizing the World after Dark. New York and London: Free Press; Collier Macmillan, 1987.
- Molotch, Harvey. "The Space of Lefebvre." Theory and Society 22 6 (1993): 887-895.
- Nango, Yoshizaku. "Behaviors That Atelier Bow-Wow Call Research." Trans. Elchert, Nathan. *Atelier Bow-Wow: Behaviorology*. Eds. Luna, Ian and Lauren A. Gould. New York, NY: Rizzoli, 2010. 321-340.
- Niederrer, Kristina. "Designing Mindful Interaction: The Category of Performative Object." *Design Issues* 2007: 3-17. Print.
- Norman, Donald A. *The Design of Everyday Things*. 1st Basic paperback. ed. New York: Basic Books, 2002.
- Papanek, Victor J. The Green Imperative: Ecology and Ethics in Design and Architecture. New York: Thames and Hudson, 1995.
- Parr, Adrian, ed. *The Deleuze Dictionary*. New York: Columbia University Press, 2005.
- Rapp, Christof. Aristotle's Rhetoric. Ed. Zalta, Edward N. 2010. The Stanford Encyclopedia of Philosophy. (Spring 2010) ed. September 9, 2011 < URL = http://plato.stanford.edu/archives/spr2010/entries/aristotle-rhetoric/.
- Riggins, Stephen Harold. The Socialness of Things: Essays on the Socio-Semiotics of Objects. Approaches to Semiotics 115. Berlin; New York: Mouton de Gruyter, 1994.
- Ruddick, Susan. "The Politics of Affect: Spinoza in the Work of Negri and Deleuze." *Theory, Culture & Society* 27.21 (2010): 21-45 pp. http://tcs.sagepub.com/content/27/4/21.
- Schmid, Christian. "Lefevbre's Theory of the Production of Space." Trans.
 Goonewardena, Bandulasena. Space, Difference, Everyday Life: Reading Henri
 Lefebvre. Eds. Goonewardena, Kanishka, et al. New York and London:
 Routledge, 2008. 27-45.
- Serres, Michel, and Bruno Latour. Conversations on Science, Culture, and Time. Ann Arbor: University of Michigan Press, 1995.
- Shields, Rob. Lefebvre, Love & Struggle. London and New York: Routledge, 1999.
- Stegall, Nathan. "Design for Sustainability: A Philosophy for Ecologically Intentional Design." *Design Issues* 22 2 (2006): 56-63.
- Thrift, Nigel. "Intensities of Feeling:Towards a Spatial Politics of Affect." Geografiska Annaler. Series B, Human Geography, Vol. 86, No. 1.Special Issue: The Political Challenge of Relational Space (2004): 57-78 pp. (September 11, 2011) http://www.jstor.org/stable/3554460>.
- Tilley, Christopher. "Interpreting Material Culture." *The Meaning of Things.* Ed. Hodder, I. London: Unwin Hyman, 1989.

- Tonkinwise, Cameron. "Ethics by Design or the Ethos of Things." *Design Philosophy Papers: Collection Two*. Ed. Willis, Anne-Marie. Ravensbourne, Australia: Team D/E/S Publications, 2005. 49-58.
- Tsukamoto, Yoshiharu. "Archigram Meets Locality." *Architectural Papers Iv: Iconoclastia.* Ed. Mateo, Chair of Prof. Dr. Josep Lluis. Zurich: ETH, 2009, 60-69.
- ---. "Architectural Behaviorology." Trans. Chodoriwsky, Steven. *Atelier Bow-Wow: Behaviorology.* Eds. Luna, Ian and Lauren A. Gould. New York, NY: Rizzoli, 2010. 8-15.
- ---. "Atelier Bow-Wow: Tokyo Anatomy." (2007). 27 January 2010 .">http://www.archinect.com/features/article.php?id=56468_0_23_0_c>.">http://www.archinect.com/features/article.php?id=56468_0_23_0_c>.">http://www.archinect.com/features/article.php?id=56468_0_23_0_c>.">http://www.archinect.com/features/article.php?id=56468_0_23_0_c>.">http://www.archinect.com/features/article.php?id=56468_0_23_0_c>.">http://www.archinect.com/features/article.php?id=56468_0_23_0_c>.">http://www.archinect.com/features/article.php?id=56468_0_23_0_c>.">http://www.archinect.com/features/article.php?id=56468_0_23_0_c>.">http://www.archinect.com/features/article.php?id=56468_0_23_0_c>.">http://www.archinect.com/features/article.php?id=56468_0_23_0_c>.">http://www.archinect.com/features/article.php?id=56468_0_23_0_c>.">http://www.archinect.com/features/article.php?id=56468_0_23_0_c>.">http://www.archinect.com/features/article.php?id=56468_0_23_0_c>.">http://www.archinect.com/features/article.php?id=56468_0_23_0_c>.">http://www.archinect.com/features/article.php?id=56468_0_23_0_c>.">http://www.archinect.com/features/article.php?id=56468_0_23_0_c>.">http://www.archinect.com/features/article.php?id=56468_0_23_0_c>.">http://www.archinect.com/features/article.php?id=56468_0_23_0_c>.">http://www.archinect.com/features/article.php?id=56468_0_23_0_c>.">http://www.archinect.com/features/article.php?id=56468_0_0_23_0_c>.">http://www.archinect.com/features/article.php?id=56468_0_0_23_0_c>.">http://www.archinect.com/features/article.php?id=56468_0_0_23_0_c>.">http://www.archinect.com/features/article.php?id=56468_0_0_23_0_0_c>.">http://www.archinect.com/features/article.php?id=56468_0_0_23_0_0_0_0
- Verbeek, Peter-Paul. "Materializing Morality: Design Ethics and Technological Mediation." Science, Technology, & Human Values 31 3 (2006): 361-380.
- ---. What Things Do. Trans. Crease, Robert P. University Park, Pennsylvania: The Pennsylvania State University Press, 2005.
- Vezzoli, Carlo, and Ezio Manzini. Design for Environmental Sustainability. London: Springer, 2008.
- Walker, Enrique. "Compendium." Trans. Elchert, Nathan. Atelier Bow-Wow: Behaviorology. Eds. Luna, Ian and Lauren A. Gould. New York, NY: Rizzoli, 2010. 344-350.
- Washida, Meruro. "Atelier Bow-Wow as Artists: Changes in Art and the Potential of New Social Space." Trans. Elchert, Nathan. Atelier Bow-Wow: Behaviorology. Eds. Luna, Ian and Lauren A. Gould. New York, NY: Rizzoli, 2010. 321-340.

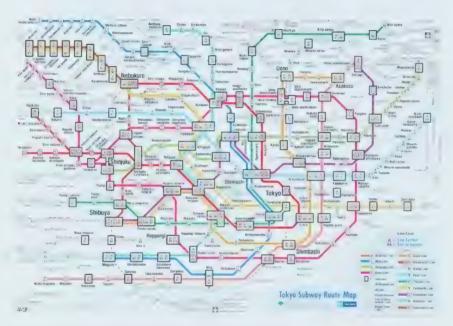
APPENDIX A

QUESTIONS FOR ATELIER BOW-WOW

- What were the beginnings of micro public space?
- How do you approach creating micro public spaces for the unique urban conditions of different places?
- Many of your books discuss the organic and evolving nature of the city.
 Is micro public space an integral part of the city's metabolism?
- What is the purpose of 'micro public space'? Do you see it as expanding discourses of space?
- French sociologist, Henri Lefebvre asks: "Why wouldn't the the concept of everydayness reveal the extraordinary in the ordinary?" This seems to be a formula in much of your work, especially with micro public space; everyday objects or structures are made extraordinary and this process exposes the hidden potential within everyday experiences. Do you think this is one role of the designer, to interpret the everyday and "reveal the extraordinary"?
- Lefebvre often discussed moments of presence as means of overcoming alienation in everyday life. When you create a micro public space are you intentionally trying to create these moments of presence?
- How do you approach designing for something that is not quantifiable, such as an experience?



15 Pages 56 and 57 of the Tokyo City Atlas , 2010 edition.



16 Tokyo Subway Route Map. 2010. Tokyo: Bureau of Transportation Tokyo Metropolitan Government



APPENDIX B

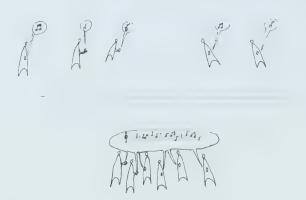
EVERYDAY ENCOUNTERS

The first section in this document, "Atelier Bow-Wow (Or How to do Design Research)," outlines a research-led practice model of design, suggesting that to make viable proposals for future ways of living, designers must be engaged in a two pronged research practice; one that is rooted in the observation of everyday life, and another which inquires and engages with the possibilities present in everyday life. Using the Atelier Bow-Wow research model as a prototype, this section aims to uncover possibilities in everyday life. Included in this section are written observations on three social sites in the city, the bus stop, the park bench and signs on the street. Throughout this section are several proposals, or propositions—in the form of drawings—which suggest possibilities for encounters between people and things. This is an inventory of ideas, some of these ideas take the form of intervention (into real spaces), some are purely inventive (imagined spaces) but each vignette attempts in some way to capture the possibilities hidden in the banality of the everyday.



BUTTING MINET

17 Roll Knoll



18 Cell phone Symphons



19 Baloon Archway



20 Violin Valley

THE BUS STOP

Some spaces in the city are simply "dead." Bus stops can be dead spaces, spaces between destinations, mere routine pauses on the way to somewhere else, somewhere better. Often we can be so attuned to this routine that we develop an instinctive sense of them. We come to know that although the schedule may state 8:36 the bus doesn't arrive until 5 minutes later, and if we leave the house at 8:32 we almost certainly will not miss it.

All this is done to avoid the deadness of waiting.

Social interactions here are limited too. What time is it? Have you seen the Number 9 go by?

Mostly, it is just suspended time.

These days we wait with music in our ears. A way of tuning out the world, suspended time becomes useful or at least useable again. As a corollary, having headphones on provides a social buffer, minimizing the chance of an unwanted encounter.

If the bus is incredibly late we wait in silence, holding our tongues.

If it is winter it becomes all the more intolerable. We stamp our feet to shake off the snow and try to keep our bodies moving. It is partly the immobility which is so frustrating. When the bus finally arrives someone may voice a 'Finally' and we'll all share a smile in our mutual relief.



21 Bus Stop Swing



22 Bus Stop Sundial

23 Haptic Railing



SUPER PICKIC BENEFI

24 Super Picnic



BONSAL BENCH

25 Bonsai Bench





26 Bus Stop Box Step



27 Balloon Tree



TREETOP PERCH

28 Treetop Perch



MEBAN NAP SACK

29 Urban "Nap" Sack



30 Umbrella Chair Share

"Are not the surreal, the extraordinary, the surprising, even the magical also part of the real? Why wouldn't the concept of everydayness reveal the extraordinary in the ordinary?"

Henri-Lefebvre and Christine Levich, "The Everyday and Everydayness" p. 9



PARE IS GROSS

31 Park n'Grow



32 Canoe Island



33 Snow Bench



34 Tete a Tete bench



35 Oval Bench



36 Highway Bike

THE PARK BENCH

There never seems to be a bench when you need one, or at least they never seem to be in the right place at the right time. Sometimes you spot a bench, a perfect bench under a shady tree with a good view of a path or a street and there is inevitably always someone there already making use of it.

Why does it seem so strange to join them, after all they are wide enough for at least three people?

Maybe it's because you want to daydream, read a book and occasionally stare off at the horizon and somehow having a stranger two feet away makes it impossible to do so. Or, maybe you don't want to disrupt their psychic space either, they may be lost in thought themselves. If it is a busy enough place it doesn't seem strange to sit with a stranger, but even then a space is left between you, an imaginary friend. Sometimes you may exchange a smile or a nod as you sit down. Occasionally a conversation may begin, usually this is avoided.

Why are we so afraid of benches?

Some cities are so afraid of benches they put armrests between each seat. They don't want people sleeping there, lying down, or using the space "inappropriately." But doesn't that defeat the purpose of the bench? Wasn't the bench put there to encourage the kind of lively well-used public space which cities aspire to?



37 Imaginary Friend Bench



18 Fall-in-love Bench



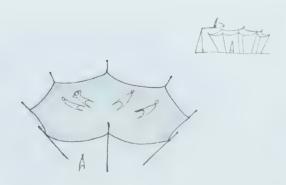
Gulf



40 Clearing



41 Bench/Terrace



42 Super Hammock



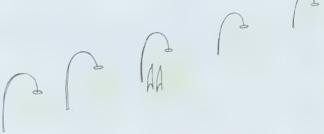
43 Balance Bench

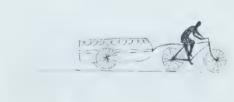


44 Sit and be Lit



45 Lamplighter







46 Market bike

SIGNS IN THE CITY

In the city, signs are everywhere. In some instances signs are useful, they tell us where and what things are, they organize space and control the chaos (traffic signs). Sometimes they tell us what to buy and try to tell us what to think and feel (advertisements, billboards). This is what could be termed visual noise but rarely do these signs actually "speak" to us.

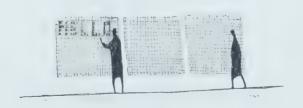
Occasionally though signs do speak.

Occasionally, we may encounter a sign whose message has been manipulated by some anonymous person. A sign that was "DEVA DAVES LADIES SHOES AND BOOTS 50 % OFF" on Tuesday is transformed humorously to "DEAD LADIES SHOES AND BOOTS 50% OFF" on Wednesday.

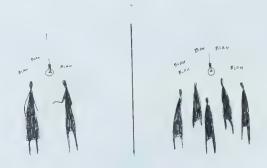
Graffiti, that ubiquitous anonymous voice can speak too. There is something about messages scrawled on the backs of bus seats or spray painted in alleyways that speaks poignantly about the state of things. Sometimes it is some insight into another persons mind and we can imagine who might have written it, usually it expresses frustration, if not in content then in the very mode of its expression. Sometimes it expresses some pervasive feeling which is vague enough so as not to be fully felt until it is pointed out, it speaks to the inner ear. How can 'anonymous' speak?



47 Urban Rain Collector



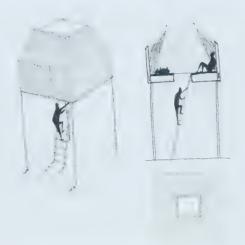
48 Text Wall



49 Social Light



50 People pebbles



Sky Fort



52 Social Hilltop

APPENDIX C

EXHIBITION & WORKS

This section provides supplementary photographic documentation of works created for the fulfillment of this degree and includes images from the graduation exhibition *The Social Object*. The exhibition took place from October 5 to October 29, 2011 at the FAB Gallery at the University of Alberta, Edmonton. "Social Object 001" was also exhibited as part of the 2011 Marshall Mcluhan centenary exhibition *Spaces & Places: Visioning Mcluhan @ 100* at Latitude 53, Edmonton.



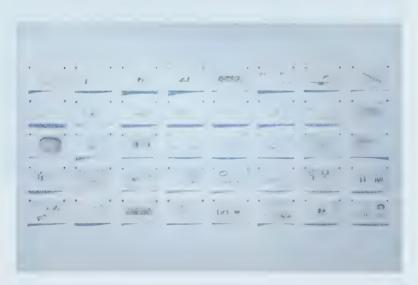
53 Installation view I . The Social Object. 2011



54 Installation view II . The Social Object. 2011



55 Installation view III . The Social Object. 2011



56 "Everyday Encounters" Installation view. The Social Object, 2011



57 "Social Object 001." The Social Object. 2011



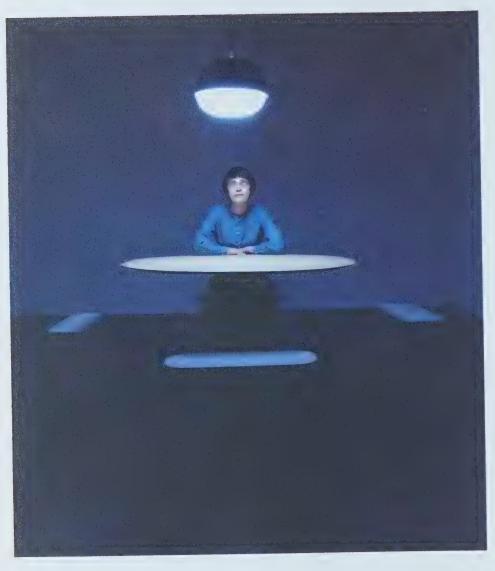
58 "Social Object 001" detail . The Social Object. 2011



59 "Social Object 002." The Social Object. 2011



60 "Social Object 002" (detail). The Social Object, 2011



61 "Social Object 002." The Social Object. 2011



62 "Pony Stool," 2011



63 "Perch Stool," 2011



